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<212> PRT

<213> Homo sapiens

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 Gly Gly Arg Pro Thr Thr Phe Ala Arg Pro Phe Ala Asp Thr Arg Val
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Ser	Ser	Pro	Cys	Leu	Gly	Ser	Ser	Ser	Ala	Ala	Ser	Ser	Pro	Pro	Pro
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Pro	Ala	Ser	Arg	Leu	Asp	Asp	Glu	Asp	Gly	Asp	Phe	Gln	Pro	Gln	Glu
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Asp	Glu	Glu	Glu	Asp	Asp	Glu	Glu	Thr	Ile	Glu	Val	Glu	Glu	Gln	Gln
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Val Met Leu Asn Trp Glu Met Glu Leu Lys Arg Trp Cys Pro Ser Phe				
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Glu His Val Ile Arg Cys Arg Leu Ser Lys Arg Gln Arg Cys Leu Tyr				
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Asp Asp Phe Met Ala Gln Thr Thr Lys Glu Thr Leu Ala Thr Gly				
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Thr Pro Gly Ile Cys Phe Ser Thr Ala Ser Leu Val Leu Arg Ala Thr				720

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 Tyr Arg Leu Ile Ser Glu Arg Thr Val Glu Glu Asn Ile Leu Lys Lys
 1905 1910 1915 1920
 Ala Asn Gln Lys Arg Met Leu Gly Asp Met Ala Ile Glu Gly Gly Asn
 1925 1930 1935
 Phe Thr Thr Ala Tyr Phe Lys Gln Gln Thr Ile Arg Glu Leu Phe Asp
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 Gly Phe Pro Ala Gly Glu Gly Glu Glu Ala Gly Arg Pro Gly Ala Glu

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Pro Ile Gly Gly Pro Cys Glu Ala Ala Pro Ser Ser Ser Leu Pro Thr		2540
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Ser	Glu	Ala	Glu	Ala	Ser
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Arg	Arg	Arg	Pro	Gly	Pro
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<210> 1992

<211> 733

<212> PRT

<213> Homo sapiens

<400> 1992

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Gly	Pro	Arg	Leu	Leu	Pro	Pro	Glu	Cys	Arg	Ser	Val	Ala	Cys	Val	Gln
			20					25					30		
Ala	Leu	Lys	Gly	Ser	Lys	Lys	Leu	Val	Leu	Ser	Val	Tyr	Ser	Ala	Gly
		35					40					45			
Arg	Ile	Pro	Gly	Gly	Tyr	Val	Thr	Asn	His	Ile	Tyr	Thr	Trp	Val	Asp
	50					55					60				
Pro	Gln	Gly	Arg	Ser	Ile	Ser	Pro	Pro	Ser	Gly	Leu	Pro	Gln	Pro	His
65					70					75				80	
Gly	Gly	Ala	Leu	Arg	Gln	Gln	Glu	Gly	Asp	Arg	Arg	Ser	Thr	Leu	His
			85					90					95		
Leu	Leu	Gln	Gly	Gly	Asp	Glu	Lys	Lys	Val	Asn	Leu	Val	Leu	Gly	Asp
		100						105					110		
Gly	Arg	Ser	Leu	Gly	Leu	Thr	Ile	Arg	Gly	Gly	Ala	Glu	Tyr	Gly	Leu
		115					120					125			
Gly	Ile	Tyr	Ile	Thr	Gly	Val	Asp	Pro	Gly	Ser	Glu	Ala	Glu	Gly	Ser
	130					135					140				
Gly	Leu	Lys	Val	Gly	Asp	Gln	Ile	Leu	Glu	Val	Asn	Gly	Arg	Ser	Phe
145				150					155					160	
Leu	Asn	Ile	Leu	His	Asp	Glu	Ala	Val	Arg	Leu	Leu	Lys	Ser	Ser	Arg
		165						170					175		
His	Leu	Ile	Leu	Thr	Val	Lys	Asp	Val	Gly	Arg	Leu	Pro	His	Ala	Arg
		180						185					190		
Thr	Thr	Val	Asp	Glu	Thr	Lys	Trp	Ile	Ala	Ser	Ser	Arg	Ile	Arg	Glu
		195					200					205			
Thr	Met	Ala	Asn	Ser	Ala	Gly	Phe	Leu	Gly	Asp	Leu	Thr	Thr	Glu	Gly
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Ile	Asn	Lys	Pro	Gly	Phe	Tyr	Lys	Gly	Pro	Ala	Gly	Ser	Gln	Val	Thr
225				230					235					240	
Leu	Ser	Ser	Leu	Gly	Asn	Gln	Thr	Arg	Val	Leu	Leu	Glu	Glu	Gln	Ala
			245					250					255		
Arg	His	Leu	Leu	Asn	Glu	Gln	Glu	His	Thr	Thr	Met	Ala	Tyr	Tyr	Leu

260	265	270
Asp Glu Tyr Arg Gly Gly Ser Val Ser Val Glu Ala Leu Val Met Ala		
275	280	285
Leu Phe Lys Leu Leu Asn Thr His Ala Lys Phe Ser Leu Leu Ser Glu		
290	295	300
Val Arg Gly Thr Ile Ser Pro Gln Asp Leu Glu Arg Phe Asp His Leu		
305	310	315
Val Leu Arg Arg Glu Ile Glu Ser Met Lys Ala Arg Gln Pro Pro Gly		
325	330	335
Pro Gly Ala Gly Asp Thr Tyr Ser Met Val Ser Tyr Ser Asp Thr Gly		
340	345	350
Ser Ser Thr Gly Ser His Gly Thr Ser Thr Thr Val Ser Ser Ala Arg		
355	360	365
Asn Thr Leu Asp Leu Glu Glu Thr Gly Glu Ala Val Gln Gly Asn Ile		
370	375	380
Asn Ala Leu Pro Asp Val Ser Val Asp Asp Val Arg Ser Thr Ser Gln		
385	390	395
Gly Leu Ser Ser Phe Lys Pro Leu Pro Arg Pro Pro Pro Leu Ala Gln		
405	410	415
Gly Asn Asp Leu Pro Leu Gly Gln Pro Arg Lys Leu Gly Arg Glu Asp		
420	425	430
Leu Gln Pro Pro Ser Ser Met Pro Ser Cys Ser Gly Thr Val Phe Ser		
435	440	445
Ala Pro Gln Asn Arg Ser Pro Pro Ala Gly Thr Ala Pro Thr Pro Gly		
450	455	460
Thr Ser Ser Ala Gln Asp Leu Pro Ser Ser Pro Ile Tyr Ala Ser Val		
465	470	475
Ser Pro Ala Asn Pro Ser Ser Lys Arg Pro Leu Asp Ala His Leu Ala		
485	490	495
Leu Val Asn Gln His Pro Ile Gly Pro Phe Pro Arg Val Gln Ser Pro		
500	505	510
Pro His Leu Lys Ser Pro Ser Ala Glu Ala Thr Val Ala Gly Gly Cys		
515	520	525
Leu Leu Pro Pro Ser Pro Ser Gly His Pro Asp Gln Thr Gly Thr Asn		
530	535	540
Gln His Phe Val Met Val Glu Val His Arg Pro Asp Ser Glu Pro Asp		
545	550	555
Val Asn Glu Val Arg Ala Leu Pro Gln Thr Arg Thr Ala Ser Thr Leu		
565	570	575
Ser Gln Leu Ser Asp Ser Gly Gln Thr Leu Ser Glu Asp Ser Gly Val		
580	585	590
Asp Ala Gly Glu Ala Glu Ala Ser Ala Pro Gly Arg Gly Arg Gln Ser		
595	600	605
Val Ser Thr Lys Ser Arg Ser Ser Lys Glu Leu Pro Arg Asn Glu Arg		
610	615	620
Pro Thr Asp Gly Ala Asn Lys Pro Pro Gly Leu Leu Glu Pro Thr Ser		
625	630	635
Thr Leu Val Arg Val Lys Lys Ser Ala Ala Thr Leu Gly Ile Ala Ile		
645	650	655
Glu Gly Gly Ala Asn Thr Arg Gln Pro Leu Pro Arg Ile Val Thr Ile		
660	665	670
Gln Arg Gly Gly Ser Ala His Asn Cys Gly Gln Leu Lys Val Gly His		
675	680	685
Val Ile Leu Glu Val Asn Gly Leu Thr Leu Arg Gly Lys Glu His Arg		

690	695	700
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705	710	715
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	725	730

<210> 1993
 <211> 957
 <212> DNA
 <213> Homo sapiens

<400> 1993
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 300
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 360
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 420
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 480
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<210> 1994
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 1994
 Xaa Lys Thr Tyr Gly Met Thr Arg Ala Leu Asp His Ile Asp Ile Ala
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<210> 1995
<211> 285
<212> DNA
<213> Homo sapiens
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180
cctatattct ttgtctcttg ttctgagaa gctgggagtt gagaccaggt aaggtgttgt
240
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285
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<210> 1996
<211> 59
<212> PRT
<213> Homo sapiens
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<400> 1996
His His His His Tyr Gln His His His His His His Tyr His Leu Tyr
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His His His His His His His His His His Tyr His His His Ala
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His His His Val Met Thr Leu Asn Thr Val Leu Ile Met Cys Asp Leu

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<210> 1997
 <211> 313
 <212> DNA
 <213> Homo sapiens

<400> 1997
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 180
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<210> 1998
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1998
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 20 25 30
 Glu Met Leu Val Gly Leu Ala Ile Gly Gly Gly Ile Gly Phe Tyr Asp
 35 40 45
 Gly Leu Phe Gly Pro Gly Thr Gly Ser Phe Leu Met Phe Leu Phe Val
 50 55 60
 Arg Phe Leu Arg Phe Asp Phe Leu His Ala Ser Ala Ala Ala Lys Val
 65 70 75 80
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 85 90 95
 Gly Asn Val Leu Tyr Gly Tyr Ala
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<210> 1999
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 1999
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 240
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 300
 gggaccaatg tcaagctgaa tagccaagcc gtcgatgcat tcgctggctt ctatcaagct
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 399

<210> 2000

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2000

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Asp	His	Val	Ile	Met	Ser	Val	Lys	Ser	Lys	Thr	Met	Val	Gly	Gln	Leu
		20						25					30		
Val	Asp	Tyr	Gly	Arg	Ile	Thr	Phe	Val	Asp	Met	Thr	Gly	Ser	Ile	Thr
		35				40						45			
Gln	Gly	Gln	Asn	Asp	Ala	Ala	Gln	Val	Val	Gly	Thr	Asn	Val	Lys	Leu
	50					55				60					
Asn	Ser	Gln	Ala	Val	Asp	Ala	Phe	Ala	Gly	Phe	Tyr	Gln	Ala	Gly	Lys
65					70				75					80	
Pro	Met	Asp	Asp	Ile	Asp	Ser	Ser	Leu	Lys	Leu					
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<210> 2001

<211> 1434

<212> DNA

<213> Homo sapiens

<400> 2001

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 180
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 240
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 720
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 1200
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 1320
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 1434

<210> 2002

<211> 79

<212> PRT

<213> Homo sapiens

<400> 2002

Xaa	Asn	Glu	Gly	Arg	His	Asn	Leu	Leu	Ile	Ser	Ser	Ala	Ala	Asp	Trp
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Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Asn
			20					25					30		
Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala	Gly	Val
			35				40					45			
Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala	Ala	Ala
			50			55					60				
Ser	Asp	Thr	Tyr	Arg	Xaa	Ser	Gly	Thr	Pro	Tyr	Thr	Phe	Gln	Pro	
65						70					75				

<210> 2003

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2003

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 120
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 180
 ggaagaaaac agataatatc acttcaaaaa cagctaatta atttcaaaaa ggaatggcaa
 240
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 300
 aaggcaaaat ccaacttggg gaatcgctac atgaaaacca ataccgagct gcagattgcc
 360
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 420
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 480
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 540
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 688

<210> 2004

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2004

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Phe	Ser	Asp	Val	Ile	Ala	Asp	Thr	Ile	Lys	Glu	Leu	Gln	Asp	Ser	Ala
			20					25					30		
Thr	Tyr	Asn	Ser	Leu	Leu	Gln	Ala	Leu	Ser	Lys	Glu	Arg	Glu	Asn	Lys
		35					40					45			
Met	His	Phe	Tyr	Asp	Ile	Ile	Ser	Arg	Glu	Glu	Lys	Gly	Arg	Lys	Gln
	50					55					60				
Ile	Ile	Ser	Leu	Gln	Lys	Gln	Leu	Ile	Asn	Phe	Lys	Lys	Glu	Trp	Gln
65				70					75					80	
Phe	Glu	Val	Gln	Ser	Gln	Asn	Glu	Tyr	Ile	Ala	Asn	Leu	Lys	Asp	Gln
			85					90					95		
Leu	Gln	Glu	Met	Lys	Ala	Lys	Ser	Asn	Leu	Glu	Asn	Arg	Tyr	Met	Lys
		100						105				110			
Thr	Asn	Thr	Glu	Leu	Gln	Ile	Ala	Gln	Thr	Gln	Lys	Lys	Cys	Asn	Arg
	115					120					125				
Thr	Glu	Glu	Leu	Leu	Val	Glu	Glu	Ile	Glu	Lys	Leu	Arg	Met	Lys	Thr
	130				135						140				
Glu	Glu	Glu	Ala	Arg	Thr	His	Thr	Glu	Ile	Glu	Met	Phe	Leu	Arg	Lys
145				150					155					160	
Glu	Gln	Gln	Val	Gly	Pro	His	Ser	Phe	Ser	Met	Leu				
			165						170						

<210> 2005
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 2005
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 120
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 240
 cagtgtctgtg tttgtcaga tggacgcaca tggaaaccag gctaggatca tcttcccaat
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 354

<210> 2006
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2006
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 Val Ile Gly Val Arg Gly Gly Leu Xaa Ala Lys Ala Ala Leu Thr Phe
 35 40 45
 Gly Lys Arg Asn Gly Lys Pro Ala Val Ser Gln Gly Leu Leu Thr Gly
 50 55 60
 Trp Val Gly Phe Gly Leu Ile Leu Gln Pro Val Leu Cys Leu Leu Arg
 65 70 75 80
 Trp Thr His Met Glu Thr Arg Leu Gly Ser Ser Ser Gln Cys Leu Leu
 85 90 95
 Pro Ala Leu Val Cys Pro Glu Asn Asn Cys Lys Asp Ile Val Ala
 100 105 110

<210> 2007
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 2007
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 tgtgcgtatg tgtgcatann catgtgcaca catgtacaca cgtgtacatg ttcattgcatg
 180
 tgcacgtgca tatgtgtaca cgtgtatgcg tgtacatgta tgagcatatg tacacgtgtg
 240

gatgtgtgtg tatgcatgtg tgtgtgcaca gatatgcctt ttcctttcat acaggctggt
 300
 ttgagtattg ctggtaggca gggacaactt tccgt
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<210> 2008
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2008
 Xaa Arg Val Pro Cys Ala Cys Val Tyr Ala Cys Met Cys Val Cys Val
 1 5 10 15
 Cys Met Cys Val Cys Ile Cys Met Cys Val Cys Ala Cys Thr Cys Xaa
 20 25 30
 Cys Ile Cys Val Cys Met His Ala Cys Ala Tyr Val Cys Ile Xaa Met
 35 40 45
 Cys Thr His Val His Thr Cys Thr Cys Ser Cys Met Cys Thr Cys Ile
 50 55 60
 Cys Val His Val Tyr Ala Cys Thr Cys Met Ser Ile Cys Thr Arg Val
 65 70 75 80
 Asp Val Cys Val Cys Met Cys Val Cys Thr Asp Met Pro Phe Pro Phe
 85 90 95
 Ile Gln Ala Gly Leu Ser Ile Ala Gly Arg Gln Gly Gln Leu Ser
 100 105 110

<210> 2009
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 2009
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 60
 ctgcgttccc caccgacat cgacgtggtc gtcggcatgg aggctcgagg cttcctcttc
 120
 gcagctccgg tcgccctggc catcggggca ggattcgtgc cggtcgcgaa gccggggaag
 180
 ctccccggcc aggtgtattc cgagacctt gccatggagt acggggagga gaccctcacc
 240
 gtccaccagt acgccatcaa gccgggggtcg cgcgtcatca tcgtcgac
 288

<210> 2010
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2010
 Asp Ile Thr Pro Leu Leu Ala Asn Pro Asn Gly Phe Ser Ala Ala Ile
 1 5 10 15
 Glu Glu Leu Val Leu Arg Ser Pro Arg Asp Ile Asp Val Val Val Gly
 20 25 30
 Met Glu Ala Arg Gly Phe Leu Phe Ala Ala Pro Val Ala Leu Ala Ile

<210> 2013
<211> 309

<212> DNA

<213> Homo sapiens

<400> 2013

gcgtatcccc acggctacgg catgaccgag cttatcgagg cggacctgtc caccgtcgaa
60
gccttgctcg cccaggtcca cagcacacaa accccggtgt acctggccaa tatcaatgcc
120
gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc
180
cgcggaacag gcgtcgccaa acgcttgagg gtcagcgtgc cgtcccattg tgcgtgctg
240
gaaaaacctg ccgaaacact ggcccaagcc ttcgctgaag tgacgctgaa aacgccgncn
300
nnccccncn
309

<210> 2014

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2014

Ala	Tyr	Pro	His	Gly	Tyr	Gly	Met	Thr	Ala	Leu	Ile	Gly	Pro	Asp	Leu
1				5					10					15	
Ser	Thr	Val	Glu	Ala	Leu	Leu	Ala	Gln	Val	His	Ser	Thr	Gln	Thr	Pro
			20					25					30		
Val	Tyr	Leu	Ala	Asn	Ile	Asn	Ala	Asp	Asn	Gln	Thr	Val	Ile	Ala	Gly
			35				40					45			
Ser	Asp	Gly	Ala	Met	Lys	Ala	Val	Ala	Asn	Leu	Val	Arg	Gly	Asn	Gly
	50					55					60				
Val	Ala	Lys	Arg	Leu	Ala	Val	Ser	Val	Pro	Ser	His	Cys	Ala	Leu	Leu
65				70					75					80	
Glu	Lys	Pro	Ala	Glu	Thr	Leu	Ala	Gln	Ala	Phe	Ala	Glu	Val	Thr	Leu
				85				90						95	
Lys	Thr	Pro	Xaa	Xaa	Pro	Xaa									
				100											

<210> 2015

<211> 329

<212> DNA

<213> Homo sapiens

<400> 2015

acgcgtgcca tgctcggtat ccgcggccac caccctgtct ttgggaccgg cgagttcacc
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gatctaggcg ggccggacat ggcagtgatg tccttctctac gtcacaacga gcacgaaacg
120
gtcctgtgcc tggctaattct ctccgatact gagcggacgg ttgcccttca ccttccacaa
180
ttcgcggggcg tggcgggctc ttctctcatc catggtcagg acgcgcaacc agtaaaagct
240
gacggaacac tgtccgtacc gttgtggcca tatggctatc gatggctgca gatgtccggt
300

gaggagaggt catgaccgct tgggaagac
329

<210> 2016
<211> 104
<212> PRT
<213> Homo sapiens

<400> 2016
Thr Arg Ala Met Leu Gly Ile Arg Arg His His Pro Val Phe Gly Thr
1 5 10 15
Gly Glu Phe Thr Asp Leu Gly Gly Pro Asp Met Ala Val Met Ser Phe
20 25 30
Leu Arg His Asn Glu His Glu Thr Val Leu Cys Leu Ala Asn Leu Ser
35 40 45
Asp Thr Glu Arg Thr Val Ala Leu His Leu Pro Gln Phe Ala Gly Val
50 55 60
Ala Gly Ser Ser Leu Ile His Gly Gln Asp Ala Gln Pro Val Lys Ala
65 70 75 80
Asp Gly Thr Leu Ser Val Pro Leu Trp Pro Tyr Gly Tyr Arg Trp Leu
85 90 95
Gln Met Ser Gly Glu Glu Arg Ser
100

<210> 2017
<211> 457
<212> DNA
<213> Homo sapiens

<400> 2017
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120
ggcgacaagc tactggccat tgacaatatc cgctggaca actgccccat ggaggacgcc
180
gtgcaaatcc tgcggcagtg cgaggacctg gtgaagctga agatccggaa ggacgaggac
240
aactctgatg agctggagac cacaggtgcc gtcagttaca cagtggagct gaagcgctac
300
gggggtcccc tgggcatcac catttcgggc acggaggaac cttttgacct cattttcatc
360
tcaggcctcc ccaaactgtg cctggctgag aggactggtg ccatccagtg ggggaaccgc
420
ttcggaccat aacaacgtta ttctcagga cggacca
457

<210> 2018
<211> 143
<212> PRT
<213> Homo sapiens

<400> 2018
Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys

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      1           5           10           15
Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile Lys Lys Gly Ser Val Ala
      20           25           30
His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp
      35           40           45
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu
      50           55           60
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp
      65           70           75           80
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu
      85           90           95
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu
      100          105          110
Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu
      115          120          125
Ala Glu Arg Thr Gly Ala Ile Gln Trp Gly Asn Arg Phe Gly Pro
      130          135          140

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<210> 2019

<211> 483

<212> DNA

<213> Homo sapiens

<400> 2019

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120
gactatctca acgtcatcag gggacatata gacaccgatc ccggcctgac cgacgtcatc
180
cccattcagg gcatggcgag cgcgccgcac cttgatttcg caggcgaaat ccgcgcggcg
240
accagcttcc ccgtcttcca tgccgcaaaa attcaggatg tcgccaccgc ccggcatgcg
300
attgccgcg gcaaggcgga catgatcggc atgaccgcg cccacatgac cgatccgcac
360
atcgctcgca agatcatgga aaaacaggag gaggacatcc gccctgcgt cggcgccaat
420
tattgtcttg atcgatttta tcaaggcggc ctgccttctt gcattcaciaa tgcggcaacc
480
ggc
483

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<210> 2020

<211> 161

<212> PRT

<213> Homo sapiens

<400> 2020

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Arg Val Gly Asp Asp Phe Ile Leu Gly Val Arg Tyr Thr Ala Asp Glu
      1           5           10           15
Cys Leu Glu Asn Gly Thr Gly Lys Ala Glu Gly Ile Glu Ile Ser Arg
      20           25           30
Arg Leu Lys Glu Ser Gly Leu Ile Asp Tyr Leu Asn Val Ile Arg Gly

```

35	40	45
His Ile Asp Thr Asp Pro Gly Leu Thr Asp Val Ile Pro Ile Gln Gly		
50	55	60
Met Ala Ser Ala Pro His Leu Asp Phe Ala Gly Glu Ile Arg Ala Ala		
65	70	75
Thr Ser Phe Pro Val Phe His Ala Ala Lys Ile Gln Asp Val Ala Thr		
85	90	95
Ala Arg His Ala Ile Ala Ala Gly Lys Val Asp Met Ile Gly Met Thr		
100	105	110
Arg Ala His Met Thr Asp Pro His Ile Val Arg Lys Ile Met Glu Lys		
115	120	125
Gln Glu Glu Asp Ile Arg Pro Cys Val Gly Ala Asn Tyr Cys Leu Asp		
130	135	140
Arg Ile Tyr Gln Gly Gly Leu Ala Phe Cys Ile His Asn Ala Ala Thr		
145	150	155
Gly		160

<210> 2021

<211> 797

<212> DNA

<213> Homo sapiens

<400> 2021

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ngaattcggt cactggctta actcggagca cagcttcacc acgacccatg acaaggaagg
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gtttctcctg agaagggcca gcaagtgtgt ttaaggacat cctccctcct gtccctgcag
120
ccctcctccc tcagtactcg cgagactacg aaaacacgtg ctgaaatgga caccgctcc
180
gggagccagt gttccgtcac ccagaagcc atactcaata atgaaaagct ggtcttgccg
240
ccccgatct ccagagtga cggctggctg ttaccctgc actactcca ggtggtgacc
300
tggtgtgtct tcgtgggctt ttctcggcc accttcggga tcttcattcc ctctctgcct
360
cacgcgtgga aatacatcgc ctatgtggtg tccttttcat cgtggcatgg tctaagcggg
420
aggggttctt ggaggacct gcgatggacc tggtgtggg gtctgggcca tggtgcccg
480
gtggcaccag tcacctgtcc tgggccagac tatgtccccc gagcctgcag gtgggccag
540
tgccccctta tggttttggc cagccccggt taagggtcag gccaggccag cgttggctga
600
gggagtccg gagagggaat ctgtcaggag ggacagcagc cccctggcgt ggccgaggac
660
ccgccctgct ggcagccttc cgctaaaatc cctgcgcagc attttgcaca tggccagccc
720
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780
gcgtttccat gccaagc
797

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<210> 2022

<211> 135
 <212> PRT
 <213> Homo sapiens

<400> 2022

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Met Asp Thr Arg Ser Gly Ser Gln Cys Ser Val Thr Pro Glu Ala Ile
 1           5           10           15
Leu Asn Asn Glu Lys Leu Val Leu Pro Pro Arg Ile Ser Arg Val Asn
 20           25           30
Gly Trp Ser Leu Pro Leu His Tyr Phe Gln Val Val Thr Trp Ala Val
 35           40           45
Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu
 50           55           60
Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp
 65           70           75           80
His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp
 85           90           95
Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro
 100          105          110
Gly Pro Asp Tyr Val Pro Arg Ala Cys Arg Trp Ala Gln Trp Pro Leu
 115          120          125
Met Val Leu Ala Ser Pro Gly
 130          135

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<210> 2023
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 2023

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naatctccga cgatccctgc cgacgtgctc gccggtgctc tcaagcaggc taaggaggct
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cgcaccgcga tccttgaggt gatgaacgag gccatcgatt ctcccgatga aatggccccg
120
actgctccgc gcatcattac cgtccacatc ccagtggaca agatcgggtga ggtcatcggc
180
cccaagggca agatgattaa ccagattcag gacgacactg gcgccaatat ctctattgag
240
gacgatggca cgattttcat cggggctgat aacggagatt cggccgagtc tgcccgttcg
300
atgatcaacg cgatcgctaa cccacagatg cccgaggctc gtgagcggtta cctcggcacc
360
gtcgtcaaga cgacgagctt tggcgctttc gtctctctgc tgcccggcaa ggatgggtctg
420
ttgcacatct ccaagatgcg tgaccttaac gacggtaaac gc
462

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<210> 2024
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 2024

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Xaa Ser Pro Thr Ile Pro Ala Asp Val Leu Ala Gly Ala Leu Lys Gln

```


1 5 10 15
 Ala Lys Glu Ala Arg Thr Ala Ile Leu Glu Val Met Asn Glu Ala Ile
 20 25 30
 Asp Ser Pro Asp Glu Met Ala Pro Thr Ala Pro Arg Ile Ile Thr Val
 35 40 45
 His Ile Pro Val Asp Lys Ile Gly Glu Val Ile Gly Pro Lys Gly Lys
 50 55 60
 Met Ile Asn Gln Ile Gln Asp Asp Thr Gly Ala Asn Ile Ser Ile Glu
 65 70 75 80
 Asp Asp Gly Thr Ile Phe Ile Gly Ala Asp Asn Gly Asp Ser Ala Glu
 85 90 95
 Ser Ala Arg Ser Met Ile Asn Ala Ile Ala Asn Pro Gln Met Pro Glu
 100 105 110
 Val Gly Glu Arg Tyr Leu Gly Thr Val Val Lys Thr Thr Ser Phe Gly
 115 120 125
 Ala Phe Val Ser Leu Leu Pro Gly Lys Asp Gly Leu Leu His Ile Ser
 130 135 140
 Lys Met Arg Asp Leu Asn Asp Gly Lys Arg
 145 150

<210> 2025

<211> 872

<212> DNA

<213> Homo sapiens

<400> 2025

cgtggtaacg atttacagga aagaacagct ggaactcgtg ctgggataac caggtacaag
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 120
 agggaggtct gtacctctc cctcatctca ttttacacaa ggcgacaggt cagaggccag
 180
 ggtgggacga gagcgaggga gcaactgtctc tggcagcagc acttgccact ccacaatgtg
 240
 gagaccagaa cggcacccca gagagcacgg gggaaatggc tcattcttaa aacaatggca
 300
 gaagaaatcc agccaaggtc acttttctctg tgtgagcatg ttaaggcca gagagtggct
 360
 acttctctgc ctctgcagc tccctcagtg tggcttgag gagttggcga agcttcaga
 420
 acacgtgga ggctgtctc cgggtgttcc cactggggac ccaggggtct gcacattcct
 480
 gcaccgctc ctgtaactgc agctgaagct ggaaagagac cgcagagctc ttgagaggcg
 540
 cggaaaacca atggcgaaat attttgtcac agatgacctg caggttggtg tttacgcgct
 600
 gcgtccgca ttgttgact cgtaaatac atcttgaaaa acagtcaaag aaattgcagt
 660
 cttcatctcc tgtgcagttt tgcacaagga tttccctcat ttaggttca aaaaaggcca
 720
 tgtccacatc aatagccacc actgtgaagt cgctccgat ggcaaagttt tccggcttga
 780
 tgtcgcagag gtggaggcgg tgggtacagt cctgtcgaa atggttcccc atgtccaaga
 840

agctgagtgc gaggccctg atggccctgg cc
872

<210> 2026

<211> 157

<212> PRT

<213> Homo sapiens

<400> 2026

Met	Gly	Asn	His	Phe	Asp	Arg	Asp	Cys	Thr	His	Arg	Leu	His	Leu	Cys
1				5				10					15		
Asp	Ile	Lys	Pro	Glu	Asn	Phe	Ala	Ile	Arg	Ser	Asp	Phe	Thr	Val	Val
		20					25					30			
Ala	Ile	Asp	Val	Asp	Met	Ala	Phe	Glu	Pro	Lys	Met	Arg	Glu	Ile	
	35					40				45					
Leu	Glu	Gln	Asn	Cys	Thr	Gly	Asp	Glu	Asp	Cys	Asn	Phe	Phe	Asp	Cys
50					55					60					
Phe	Ser	Arg	Cys	Asp	Leu	Arg	Val	Asn	Lys	Cys	Gly	Ala	Gln	Arg	Val
65				70					75				80		
Asn	Asn	Asn	Leu	Gln	Val	Ile	Cys	Asp	Lys	Ile	Phe	Arg	His	Trp	Phe
			85					90					95		
Ser	Ala	Pro	Leu	Lys	Ser	Ser	Ala	Val	Ser	Phe	Gln	Leu	Gln	Leu	Gln
		100					105					110			
Leu	Gln	Glu	Ala	Val	Gln	Glu	Cys	Ala	Asp	Pro	Gly	Val	Pro	Ser	Gly
	115					120					125				
Asn	Thr	Arg	Arg	Ala	Ala	Ser	Ser	Val	Phe	Trp	Lys	Leu	Arg	Gln	Leu
	130				135					140					
Leu	Gln	Ala	Thr	Leu	Arg	Glu	Leu	Gln	Glu	Ala	Glu	Lys			
145					150					155					

<210> 2027

<211> 721

<212> DNA

<213> Homo sapiens

<400> 2027

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gacaaatata gtgtaaaagg cgcaatggaa tttgtatagt gaaggagatt ctctagtccc
120
agggttgtaa tgtcacttct gtctaattca ttacagaatt acagaatcaa atcatgttag
180
cctagaaga aactgcagat ctttttgttc aatcttctca ttatatagga aaggaaattt
240
gagggccagt gcaatggttt gccaaaggtca cacaactagt tagtggaagg atccaggcat
300
tctaattcct ttctttcact aatacatttg gactgctcta cagaattact tctgtctgat
360
actatccact ttgaagagta gctagcatat agtagccatt tacttttggc tcaattaa
420
gcaaacattt ttgggacaaa atcaggcttt cctgattact tcttagataa cagagcccac
480
acagtattaa aacatgcagc ctttctttat gcaaaaagat tgaatatgga gccacttgaa
540

tcttaaactt cagtctgcag ctataaccaa tatcatcaga agttatacac aattggcaaa
 600
 agaatagctt attctgcccc aatacttgtc cagtcactag gatcatttca cttttttgaa
 660
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 720
 a
 721

<210> 2028

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2028

Met	Asn	Ser	Arg	Ser	Gly	Asn	Thr	Ser	Leu	Pro	Lys	Ala	Asn	Gly	Ile
1				5					10					15	
Gln	Lys	Ser	Glu	Met	Ile	Leu	Val	Thr	Gly	Gln	Val	Phe	Gly	Gln	Asn
			20					25					30		
Lys	Leu	Phe	Phe	Cys	Gln	Leu	Cys	Ile	Thr	Ser	Asp	Asp	Ile	Gly	Tyr
		35				40					45				
Ser	Cys	Arg	Leu	Lys	Phe	Lys	Ile	Gln	Val	Ala	Pro	Tyr	Ser	Ile	Phe
	50					55					60				
Leu	His	Lys	Glu	Arg	Leu	His	Val	Leu	Ile	Leu	Cys	Gly	Leu	Cys	Tyr
65				70					75					80	
Leu	Arg	Ser	Asn	Gln	Glu	Ser	Leu	Ile	Leu	Ser	Gln	Lys	Cys	Leu	Leu
			85					90					95		
Leu	Ile	Glu	Pro	Lys	Val	Asn	Gly	Tyr	Tyr	Met	Leu	Ala	Thr	Leu	Gln
			100				105						110		

Ser Gly

<210> 2029

<211> 8028

<212> DNA

<213> Homo sapiens

<400> 2029

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 120
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 180
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 420
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 480

ctagagtctc caaatccaga aaacaaggac tatgaagagc caaagaaagt acggaaacca
540
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600
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660
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720
gctgctaaga gacggcagat gcaggaagca gaaatgatgt atcaaactgg aatgaaaatc
780
cttaatggaa gcaataagaa aagccaaaaa agagaagcat atcggatatct ccaaaaggca
840
gcaagcatga accataccaa agccctggag agagtgtcat atgctctttt atttggtagat
900
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960
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1080
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1260
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1320
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1500
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1620
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1680
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1740
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1800
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1860
cgttggtctg aaaggcttat gactgcctat aacagctata aagatggcga ttacaatgct
1920
gcagtgatcc agtacctcct cctggctgaa cagggtatg aagtggcaca aagcaatgca
1980
gcctttattc ttgatcagag agaagcaagc attgtagggtg agaatgaaac ttatcccaga
2040
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2100

ggagactacc atttctatgg gtttggcacc gatgtagatt atgaaactgc atttattcat
2160
taccgtcttg cttctgagca gcaacacagt gcacaagcta tgtttaatct gggatatatg
2220
catgagaaag gactgggcat taaacaggat attcaccttg cgaaacgttt ttatgacatg
2280
gcagctgaag ccagcccaga tgcacaagtt ccagtcttcc tagccctctg caaattgggc
2340
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2400
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2520
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2580
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2640
acacttgcatt ttgatttagg accttgatc agtggtcacc tcccagaaga ggcacggcac
2700
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2760
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2820
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2880
tatccagcta tctttcttgg atccttttgg tcattatttc agtgtgcata agttcttaat
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<210> 2030

<211> 794

<212> PRT

<213> Homo sapiens

<400> 2030

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Leu	Asp	Ser	Lys	Thr	Thr	Leu	Thr	Ser	Asp	Glu	Ser	Val	Lys	Asp	His
		35					40					45			
Thr	Thr	Ala	Gly	Arg	Val	Val	Ala	Gly	Gln	Ile	Phe	Leu	Asp	Ser	Glu
	50					55					60				
Glu	Ser	Glu	Leu	Glu	Ser	Ser	Ile	Gln	Glu	Glu	Glu	Asp	Ser	Leu	Lys
65					70					75				80	
Ser	Gln	Glu	Gly	Glu	Ser	Val	Thr	Glu	Asp	Ile	Ser	Phe	Leu	Glu	Ser

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Pro Asn Pro Glu Asn Lys Asp Tyr Glu Glu Pro Lys Lys Val Arg Lys					
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Pro Ala Leu Thr Ala Ile Glu Gly Thr Ala His Gly Glu Pro Cys His					
	115		120		125
Phe Pro Phe Leu Phe Leu Asp Lys Glu Tyr Asp Glu Cys Thr Ser Asp					
	130		135		140
Gly Arg Glu Asp Gly Arg Leu Trp Cys Ala Thr Thr Tyr Asp Tyr Lys					
	145		150		155
Ala Asp Glu Lys Trp Gly Phe Cys Glu Thr Glu Glu Glu Ala Ala Lys					
	165		170		175
Arg Arg Gln Met Gln Glu Ala Glu Met Met Tyr Gln Thr Gly Met Lys					
	180		185		190
Ile Leu Asn Gly Ser Asn Lys Lys Ser Gln Lys Arg Glu Ala Tyr Arg					
	195		200		205
Tyr Leu Gln Lys Ala Ala Ser Met Asn His Thr Lys Ala Leu Glu Arg					
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Val Ser Tyr Ala Leu Leu Phe Gly Asp Tyr Leu Pro Gln Asn Ile Gln					
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Ala Ala Arg Glu Met Phe Glu Lys Leu Thr Glu Glu Gly Ser Pro Lys					
	245		250		255
Gly Gln Thr Ala Leu Gly Phe Leu Tyr Ala Ser Gly Leu Gly Val Asn					
	260		265		270
Ser Ser Gln Ala Lys Ala Leu Val Tyr Tyr Thr Phe Gly Ala Leu Gly					
	275		280		285
Gly Asn Leu Ile Ala His Met Val Leu Gly Tyr Arg Tyr Trp Ala Gly					
	290		295		300
Ile Gly Val Leu Gln Ser Cys Glu Ser Ala Leu Thr His Tyr Arg Leu					
	305		310		315
Val Ala Asn His Val Ala Ser Asp Ile Ser Leu Thr Gly Gly Ser Val					
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Val Gln Arg Ile Arg Leu Pro Asp Glu Val Glu Asn Pro Gly Met Asn					
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Ser Gly Met Leu Glu Glu Asp Leu Ile Gln Tyr Tyr Gln Phe Leu Ala					
	355		360		365
Glu Lys Gly Asp Val Gln Ala Gln Val Gly Leu Gly Gln Leu His Leu					
	370		375		380
His Gly Gly Arg Gly Val Glu Gln Asn His Gln Arg Ala Phe Asp Tyr					
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Phe Asn Leu Ala Ala Asn Ala Gly Asn Ser His Ala Met Ala Phe Leu					
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Gly Lys Met Tyr Ser Glu Gly Ser Asp Ile Val Pro Gln Ser Asn Glu					
	420		425		430
Thr Ala Leu His Tyr Phe Lys Lys Ala Ala Asp Met Gly Asn Pro Val					
	435		440		445
Gly Gln Ser Gly Leu Gly Met Ala Tyr Leu Tyr Gly Arg Gly Val Gln					
	450		455		460
Val Asn Tyr Asp Leu Ala Leu Lys Tyr Phe Gln Lys Ala Ala Glu Gln					
	465		470		475
Gly Trp Val Asp Gly Gln Leu Gln Leu Gly Ser Met Tyr Tyr Asn Gly					
	485		490		495
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	500		505		510
Ala Ser Gln Gly Gly His Ile Leu Ala Phe Tyr Asn Leu Ala Gln Met					

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530	535	540
Leu Phe Lys Asn Val Cys Glu Arg Gly Arg Trp Ser Glu Arg Leu Met		
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Thr Ala Tyr Asn Ser Tyr Lys Asp Gly Asp Tyr Asn Ala Ala Val Ile		
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Gln Tyr Leu Leu Leu Ala Glu Gln Gly Tyr Glu Val Ala Gln Ser Asn		
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Glu Thr Tyr Pro Arg Ala Leu Leu His Trp Asn Arg Ala Ala Ser Gln		
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Gly Tyr Thr Val Ala Arg Ile Lys Leu Gly Asp Tyr His Phe Tyr Gly		
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Phe Gly Thr Asp Val Asp Tyr Glu Thr Ala Phe Ile His Tyr Arg Leu		
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Ala Ser Glu Gln Gln His Ser Ala Gln Ala Met Phe Asn Leu Gly Tyr		
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Met His Glu Lys Gly Leu Gly Ile Lys Gln Asp Ile His Leu Ala Lys		
675	680	685
Arg Phe Tyr Asp Met Ala Ala Glu Ala Ser Pro Asp Ala Gln Val Pro		
690	695	700
Val Phe Leu Ala Leu Cys Lys Leu Gly Val Val Tyr Phe Leu Gln Tyr		
705	710	715
Ile Arg Glu Thr Asn Ile Arg Asp Met Phe Thr Gln Leu Asp Met Asp		
725	730	735
Gln Leu Leu Gly Pro Glu Trp Asp Leu Tyr Leu Met Thr Ile Ile Ala		
740	745	750
Leu Leu Leu Gly Thr Val Ile Ala Tyr Arg Gln Arg Gln His Gln Asp		
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<210> 2031

<211> 662

<212> DNA

<213> Homo sapiens

<400> 2031

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<210> 2032

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2032

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			20					25					30		
Ile	Thr	Val	Arg	Asp	Val	Ala	Leu	Asn	Pro	Val	Pro	His	Leu	Asp	Thr
		35					40					45			
His	Leu	Leu	Gly	Gly	Trp	Met	Lys	Pro	Ala	Glu	Gln	Arg	Ser	Ala	Ile
	50				55						60				
Glu	Gln	Ala	Ser	Leu	Asp	Arg	Ser	Asn	Gln	Leu	Thr	Asp	Glu	Leu	Leu
65				70						75				80	
Ala	Ala	Asp	Val	Leu	Val	Met	Ala	Ala	Pro	Met	Tyr	Asn	Phe	Ala	Ile
			85						90				95		
Pro	Ser	Thr	Leu	Lys	Ala	Trp	Leu	Asp	His	Val	Leu	Arg	Ala	Gly	Val
			100					105					110		
Thr	Phe	Lys	Tyr	Thr	Ala	Thr	Gly	Pro	Gln	Gly	Leu	Leu	His	Gly	Lys
			115				120						125		
Arg	Ala	Ile	Val	Leu	Thr	Ala	Arg	Gly	Gly	Ile	His	Thr	Gly	Ala	Ser
	130					135					140				
Ser	Asp	His	Gln	Glu	Pro	Tyr	Leu	Arg	Gln	Val	Met	Ala	Phe	Ile	Gly
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<210> 2033

<211> 380

<212> DNA

<213> Homo sapiens

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<210> 2034

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2034

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			20					25				30			
Glu	Leu	Lys	Ser	Glu	Leu	Ala	Ser	Pro	Phe	Ala	Ala	Ile	Tyr	Asp	Thr
		35					40					45			
Lys	Ala	Lys	Asn	Lys	Val	Thr	Asp	Gln	Pro	Val	Gly	Thr	Gly	Pro	Tyr
	50					55					60				
Gln	Ile	Asp	Ser	Tyr	Lys	Arg	Ser	Gln	Lys	Ile	Val	Leu	Lys	Gln	Phe
65					70					75				80	
Lys	Asp	Tyr	Trp	Gln	Gly	Thr	Pro	Lys	Leu	Lys	Arg	Ile	Asn	Val	Thr
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Tyr	His	Glu	Asp	Gly	Asn	Xaa	Arg	Val	Asp						
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<210> 2035

<211> 495

<212> DNA

<213> Homo sapiens

<400> 2035

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<210> 2036
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2036
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 35 40 45
 Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly
 50 55 60
 Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu
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 Leu Tyr

<210> 2037
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 2037
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<210> 2038
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2038
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Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala
      35      40      45
Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln
      50      55      60
Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
65      70      75      80
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
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His Glu

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<210> 2039

<211> 307

<212> DNA

<213> Homo sapiens

<400> 2039

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307

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<210> 2040

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2040

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      20      25      30
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
      35      40      45
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
      50      55      60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro
65      70      75      80
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
      85      90

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<210> 2041

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2041

nnccggcgat gcagggattc gcccgcgatg cgctcgaacc cggcgcgggg ggcgttcctc
 60
 gccagcttcc tgccgttcgc cagacgcacg gccgagggcg gggtagcgaa ttcgctcgcc
 120
 cagctggtcg ccaagctgac cctgcccggc atgcccgcaca tctaccaggg ctgcgagatg
 180
 tgggacctca gcctggtcga ccgggacaat cgccgccccg tcgactacga gacacgcgac
 240
 gcggcccttg ccggctgggt cgcgaccccg ccggaggaac gcgcgcggc gctgcgcacc
 300
 ctgctgacgg attggcgag cggcgcggtc aagctggccg tgacgcgt
 348

<210> 2042

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2042

Xaa Arg Arg Cys Arg Asp Ser Pro Ala Met Arg Ser Asn Pro Ala Arg
 1 5 10 15
 Gly Ala Phe Leu Ala Ser Phe Leu Pro Phe Ala Arg Arg Ile Ala Glu
 20 25 30
 Ala Gly Val Arg Asn Ser Leu Ala Gln Leu Val Ala Lys Leu Thr Leu
 35 40 45
 Pro Gly Met Pro Asp Ile Tyr Gln Gly Cys Glu Met Trp Asp Leu Ser
 50 55 60
 Leu Val Asp Arg Asp Asn Arg Arg Pro Val Asp Tyr Glu Thr Arg Asp
 65 70 75 80
 Ala Ala Leu Ala Gly Trp Val Ala Thr Pro Pro Glu Glu Arg Ala Ala
 85 90 95
 Ala Leu Arg Thr Leu Leu Thr Asp Trp Arg Ser Gly Ala Val Lys Leu
 100 105 110
 Ala Val Thr Arg
 115

<210> 2043

<211> 712

<212> DNA

<213> Homo sapiens

<400> 2043

gatctgacgg tctcgactaa gcctgaccat tccgaggtca ccgacgccga ccttgccgtc
 60
 gaagattcgg tgccgagagc cctgtctcga atgcgctccc gggatgccgt ccacggcgag
 120
 gaacgtgcgg ataccgggga tggaccccg cggtaggatca ttgatccgat cgacggcact
 180
 gcgaattttc tgctgggggt ccagtggtg gccacctca ttgccctcag cgtcgaggag
 240
 cagattgtcg catctgtggt ctctgtcct gccctcaagc gacgctggtg ggcagcccgt
 300

ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat
 360
 gtgcgcaatc ttgccgacgc attcttgctc tactcttcgc tgcacggatg ggtcgagagc
 420
 ggacgagggc acgggttcgg tgaactcatg cggtcggtgt ggcggacccg agccttcggc
 480
 gatttctggt cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa
 540
 ctacgcctgc acgacatggc cgcctcgcac gctatcgtca ccgaggcggg cggttaagttc
 600
 accggtctcg atggcaaaga cggccctggtg tctgggaatg ctctggcgtc gaatggtttc
 660
 cttcatgacc aggccctagc catgggtccag cctcaggagt gagcacccat cg
 712

<210> 2044

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2044

Asp	Leu	Thr	Val	Ser	Thr	Lys	Pro	Asp	His	Ser	Glu	Val	Thr	Asp	Ala
1				5					10					15	
Asp	Leu	Ala	Val	Glu	Asp	Ser	Val	Arg	Arg	Ala	Leu	Ser	Arg	Met	Arg
			20					25					30		
Ser	Arg	Asp	Ala	Val	His	Gly	Glu	Glu	Arg	Ala	Asp	Thr	Gly	Asp	Gly
			35				40					45			
Pro	Arg	Arg	Trp	Ile	Ile	Asp	Pro	Ile	Asp	Gly	Thr	Ala	Asn	Phe	Leu
			50			55					60				
Arg	Gly	Val	Pro	Val	Trp	Ala	Thr	Leu	Ile	Ala	Leu	Ser	Val	Glu	Asp
65				70						75				80	
Gln	Ile	Val	Ala	Ser	Val	Val	Ser	Ala	Pro	Ala	Leu	Lys	Arg	Arg	Trp
			85					90						95	
Trp	Ala	Ala	Arg	Gly	Ser	Gly	Ala	Trp	Ser	Gly	Lys	Ser	Leu	Ala	Ser
			100					105					110		
Ala	Thr	Pro	Ile	His	Val	Ser	Asn	Val	Arg	Asn	Leu	Ala	Asp	Ala	Phe
			115				120					125			
Leu	Ser	Tyr	Ser	Ser	Leu	His	Gly	Trp	Val	Glu	Ser	Gly	Arg	Gly	His
			130			135					140				
Gly	Phe	Gly	Glu	Leu	Met	Arg	Ser	Val	Trp	Arg	Thr	Arg	Ala	Phe	Gly
145				150					155					160	
Asp	Phe	Trp	Ser	Tyr	Met	Met	Val	Ala	Glu	Gly	Val	Val	Asp	Val	Ala
			165					170					175		
Cys	Glu	Pro	Glu	Leu	Ser	Leu	His	Asp	Met	Ala	Ala	Leu	Asp	Ala	Ile
			180					185					190		
Val	Thr	Glu	Ala	Gly	Gly	Lys	Phe	Thr	Gly	Leu	Asp	Gly	Lys	Asp	Gly
			195			200						205			
Pro	Trp	Ser	Gly	Asn	Ala	Leu	Ala	Ser	Asn	Gly	Phe	Leu	His	Asp	Gln
			210			215						220			
Ala	Leu	Ala	Met	Val	Gln	Pro	Gln	Glu							
225					230										

<210> 2045

<211> 406

<212> DNA

<213> Homo sapiens

<400> 2045

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nnttgacac cggcgactat gccgccaccg cacggatcaa tcgcggaacc agggcagggg
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atgcgcgcga tgggcgacgg tgatggaccg ggcgtggac ctgggcggtc gcttcgacga
120
cantacaggc tttggccgag gcgggttga agaaaccggt caaccggtgg tttggccccg
180
catcaatgcc cagaaccaga agccttgccg attcgtecca ggccgttcaa ggccgatggc
240
gagatcgctg cgatgactgg cgacggtgtc aacgacgccc cctcgctcaa ggccggccat
300
atcgggtgtg ccatggacaa acgcggcacc gacgtcgccg gcgaggcttc cgccatggtc
360
ctgctcgagg atgattttgg atcgatcgtg cagtcggtcc ggctcg
406

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<210> 2046

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2046

```

Xaa Trp Thr Pro Ala Thr Met Pro Pro Pro His Gly Ser Ile Ala Asp
 1           5           10           15
Pro Gly Gln Gly Met Arg Arg Met Gly Asp Gly Asp Gly Pro Gly Ala
          20           25           30
Gly Pro Gly Arg Ser Leu Arg Arg Xaa Tyr Arg Leu Trp Pro Arg Arg
          35           40           45
Val Gly Arg Asn Arg Ser Thr Gly Gly Leu Ala Pro His Gln Cys Pro
          50           55           60
Glu Pro Glu Ala Leu Arg Ile Arg Pro Arg Pro Phe Lys Ala Asp Gly
          65           70           75           80
Glu Ile Val Ala Met Thr Gly Asp Gly Val Asn Asp Ala Pro Ser Leu
          85           90           95
Lys Ala Ala His Ile Gly Val Ala Met Asp Lys Arg Gly Thr Asp Val
          100          105          110
Ala Arg Glu Ala Ser Ala Met Val Leu Leu Glu Asp Asp Phe Gly Ser
          115          120          125
Ile Val Gln Ser Val Arg Leu
          130          135

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<210> 2047

<211> 796

<212> DNA

<213> Homo sapiens

<400> 2047

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aagcttttga acgagacccc tgagctctgg gttcagcccc gaggaagccc agcaacagga
60
tgaggaattdt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcagggg
120

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tgctggccgg ccaggagaga gaggatccgg gggcttggtc agtcctagca ctgcccacgt
 180
 gccggatggg gcaactcggg agagagacca gacgagctgg caaacacgtg atgctagcca
 240
 ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgtga
 300
 cctggaagat ggggagatgg gaaagcgagg ctgggtcggg gagtttagcc tcagtgttgg
 360
 cccccagcga gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcat
 420
 cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtgggtg
 480
 tggcttttagc ccttctagca agatggaagg tggcacttt gtgcctcctg ggaagaccac
 540
 agctggctcg gtggactgga ctgaccagct gggctcagg aacttgggaag tgtccagctg
 600
 tgtgggttct gggggctcga gcgaggccag ggagagtgcc gtgggacaga tgggctggtc
 660
 aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaaagtg gagggctga
 720
 agagccgggg ggaatcggaa ttggggagaa ggactggact tctgatgtta atgtgaagag
 780
 caaagatttg gctgag
 796

<210> 2048

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2048

Met	Gly	Lys	Arg	Gly	Trp	Val	Gly	Glu	Phe	Ser	Leu	Ser	Val	Gly	Pro
1				5					10					15	
Gln	Arg	Glu	Ala	Ala	Phe	Ser	Pro	Gly	Gln	Gln	Asp	Trp	Ser	Arg	Asp
			20					25					30		
Phe	Cys	Ile	Glu	Ala	Ser	Glu	Arg	Ser	Tyr	Gln	Phe	Gly	Ile	Ile	Gly
		35					40					45			
Asn	Asp	Arg	Val	Ser	Gly	Ala	Gly	Phe	Ser	Pro	Ser	Ser	Lys	Met	Glu
	50				55						60				
Gly	Gly	His	Phe	Val	Pro	Pro	Gly	Lys	Thr	Thr	Ala	Gly	Ser	Val	Asp
65				70					75					80	
Trp	Thr	Asp	Gln	Leu	Gly	Leu	Arg	Asn	Leu	Glu	Val	Ser	Ser	Cys	Val
			85				90							95	
Gly	Ser	Gly	Gly	Ser	Ser	Glu	Ala	Arg	Glu	Ser	Ala	Val	Gly	Gln	Met
		100					105					110			
Gly	Trp	Ser	Gly	Gly	Leu	Ser	Leu	Arg	Asp	Met	Asn	Leu	Thr	Gly	Cys
	115					120					125				
Leu	Glu	Ser	Gly	Gly	Ser	Glu	Glu	Pro	Gly	Gly	Ile	Gly	Ile	Gly	Glu
	130				135					140					
Lys	Asp	Trp	Thr	Ser	Asp	Val	Asn	Val	Lys	Ser	Lys	Asp	Leu	Ala	Glu
145				150					155						160

<210> 2049

<211> 516

<212> DNA

<213> Homo sapiens

<400> 2049

cgcgtcgctt acggtgcgct gaataccagc ctgctggcgc tggcgggtcag cttcgcgctcg
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 ctgttcctcg ggatagtgtt cgggctgatg ccacgtctga tgtgcggggg gattgaactg
 120
 gccaacgctc ccccgccaat cgccctgggc ctgttagtag tcgccattag cggcccttca
 180
 gcctacgggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgcccattgt
 240
 gcttcgttgt tggcggaagc ccgcacgcag ccctatatcc gcatgttgcc ggtattgggc
 300
 gtcggccgat ggcgcacgct gaccactac ctgctgccgg cgctctctgc tcccctgtg
 360
 cgccacgcca tgttgctct gcggggcatt gcgctggcgc tggcggcctt ggggtttttt
 420
 ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcattgct
 480
 tatctcgaac gggcgccctg gggagtctg gcaccg
 516

<210> 2050

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2050

Arg	Val	Ala	Tyr	Gly	Ala	Leu	Asn	Thr	Ser	Leu	Leu	Ala	Leu	Ala	Val
1				5				10					15		
Ser	Phe	Ala	Ser	Leu	Phe	Leu	Gly	Ile	Val	Phe	Gly	Leu	Met	Pro	Arg
		20					25					30			
Leu	Met	Cys	Gly	Val	Ile	Glu	Leu	Ala	Asn	Ala	Pro	Pro	Pro	Ile	Ala
	35					40					45				
Leu	Gly	Leu	Leu	Val	Val	Ala	Ile	Ser	Gly	Pro	Ser	Ala	Tyr	Gly	Ala
	50				55					60					
Ala	Cys	Ala	Val	Met	Leu	Val	Ser	Trp	Ala	Pro	Leu	Ala	Ala	His	Cys
65				70				75						80	
Ala	Ser	Leu	Leu	Ala	Glu	Ala	Arg	Thr	Gln	Pro	Tyr	Ile	Arg	Met	Leu
		85					90						95		
Pro	Val	Leu	Gly	Val	Gly	Arg	Trp	Arg	Thr	Leu	Thr	His	Tyr	Leu	Leu
	100					105						110			
Pro	Ala	Leu	Ser	Ala	Pro	Leu	Leu	Arg	His	Ala	Met	Leu	Arg	Leu	Pro
	115					120					125				
Gly	Ile	Ala	Leu	Ala	Leu	Ala	Ala	Leu	Gly	Phe	Phe	Gly	Leu	Gly	Pro
	130				135						140				
Gln	Pro	Pro	Ser	Ala	Glu	Trp	Gly	Leu	Val	Leu	Ala	Glu	Gly	Met	Pro
145				150				155						160	
Tyr	Leu	Glu	Arg	Ala	Pro	Trp	Gly	Val	Leu	Ala	Pro				
		165				170									

<210> 2051

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2051

gagcaaaact atcggttctac cggcaatatt ctgaaaagt ccaaccaact tatttcgaat
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 aatagtgatc gtctcggtaa gaatttatgg accgacggtg aaatggggga gccagtaggt
 120
 atttatgcag catttaatga attagatgag gcaaaatttg tggcgtctca aatccaaaat
 180
 tgggtagatg atgggtggga attagatgat tgtgctgttt tatatcgtag taatagccaa
 240
 tctcgtgtta ttgaagaagc cttgattcgt tgccaaattc cttatcgaat ttatggcggg
 300
 atgcgattct tcgaacgcca agaaattaaa gatgcgttgg catatttacg ttttaattaat
 360
 aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgctacgcg t
 411

<210> 2052

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2052

Glu	Gln	Asn	Tyr	Arg	Ser	Thr	Gly	Asn	Ile	Leu	Lys	Ser	Ala	Asn	Gln
1				5				10						15	
Leu	Ile	Ser	Asn	Asn	Ser	Asp	Arg	Leu	Gly	Lys	Asn	Leu	Trp	Thr	Asp
			20					25					30		
Gly	Glu	Met	Gly	Glu	Pro	Val	Gly	Ile	Tyr	Ala	Ala	Phe	Asn	Glu	Leu
		35					40					45			
Asp	Glu	Ala	Lys	Phe	Val	Ala	Ser	Gln	Ile	Gln	Asn	Trp	Val	Asp	Asp
	50					55					60				
Gly	Gly	Glu	Leu	Asp	Asp	Cys	Ala	Val	Leu	Tyr	Arg	Ser	Asn	Ser	Gln
65				70						75				80	
Ser	Arg	Val	Ile	Glu	Glu	Ala	Leu	Ile	Arg	Cys	Gln	Ile	Pro	Tyr	Arg
			85					90					95		
Ile	Tyr	Gly	Gly	Met	Arg	Phe	Phe	Glu	Arg	Gln	Glu	Ile	Lys	Asp	Ala
		100						105				110			
Leu	Ala	Tyr	Leu	Arg	Leu	Ile	Asn	Asn	Arg	Gln	Asp	Asp	Ala	Ala	Phe
	115					120					125				
Glu	Arg	Val	Ile	Asn	Thr	Pro	Thr	Arg							
	130					135									

<210> 2053

<211> 287

<212> DNA

<213> Homo sapiens

<400> 2053

nccatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgccaaatc
 60
 ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaagac
 120

ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc
 180
 acacctgagg gtgccgaggg cccgactccg caaaccacgc accagctgaa ggcctgtgc
 240
 tccctggctg cagagggtat gtggacagac acatttgagt tttgtga
 287

<210> 2054
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 2054
 Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys
 1 5 10 15
 Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr
 20 25 30
 Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly
 35 40 45
 Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys
 50 55 60
 Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys
 65 70 75

<210> 2055
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 2055
 nnacgcgttg ttatgaacaa tgacggtgtc ctctaccccg atacctgcgt gggacttgat
 60
 tcccacacca ccatggaaaa tggctctggc attctgggct gggcgctcgg tggattgaa
 120
 gccgaggctg ctatgcttgg ccagcccatc tccatgctta tccccgtgt tgttggttt
 180
 aaacttactg gccaaacaca gccgggtgtc accgctacag atgttgttct taccattact
 240
 gatatgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg
 298

<210> 2056
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2056
 Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys
 1 5 10 15
 Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu
 20 25 30
 Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Ala Met Leu Gly Gln
 35 40 45
 Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly

50 55 60
 Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr
 65 70 75 80
 Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr
 85 90 95
 Gly Gly Ser

<210> 2057

<211> 569

<212> DNA

<213> Homo sapiens

<400> 2057

acgcgtcccg acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta
 60
 gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa
 120
 caaaatctag ttggacccaa caacgcccag tatggctcgtt atctagcctt tggatgatc
 180
 ttcattggtct tcaataacca gaaaaagggg ctggatacag ttacagacta tcaccgtggg
 240
 ttggatatca cagaagccac tactacaact tcttacaccc aagatggaac gacctttaaa
 300
 agagaaacct tctcaagta cctgatgat gttactgtta ctcaactgac ccaaaaaggg
 360
 gacaaaaaac ttgattttac agtttgaat agcttaacag aagatttact tgctaacgga
 420
 gactactcag cggaatattc taactacaag agtggccatg ttacgacaga cccaaatggg
 480
 atcctactaa aaggtacagt caaagataat ggctccagt tcgcatccta tctaggaatt
 540
 aaaacggacg gaaaagttac tgttcatga
 569

<210> 2058

<211> 128

<212> PRT

<213> Homo sapiens

<400> 2058

Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr
 1 5 10 15
 His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Thr Ser Tyr Thr
 20 25 30
 Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp
 35 40 45
 Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp
 50 55 60
 Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp
 65 70 75 80
 Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp
 85 90 95
 Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln

100 105 110
 Phe Ala Ser Tyr Leu Gly Ile Lys Thr Asp Gly Lys Val Thr Val His
 115 120 125

<210> 2059
 <211> 644
 <212> DNA
 <213> Homo sapiens

<400> 2059
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 agcaatcgac ctgtaggact cagccatgat cgactgggca tctctgtata gtcgcgatgc
 120
 cgcaaccgcc tgcgcttcca agcctgcagc gacgtaagag gccctctcac aactgaacc
 180
 gatcgctcca gacaacgtgg aagcgataac ctgcgctcgc ttctgctgat tctgggcca
 240
 gctcgacaag aagaaccgca gaggggagc ggcctggta gggagcgcac cttcagcgtt
 300
 cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgtcatgag
 360
 tcggccgagg tccgccggt cctctctcat ggcttcaca ggaacgcggt cacacaccac
 420
 cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc
 480
 gtagcgggct gctgaggta caaatccca cagatccgag gctggagca actgagccgc
 540
 cagatcacga ttgcgggtca ccacagagtc gatgtccggg gcacgagga tggccaaacc
 600
 tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt
 644

<210> 2060
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2060
 Met Arg Glu Val Pro Ala Asp Leu Gly Arg Leu Met Thr Glu Arg Gly
 1 5 10 15
 Leu Ala Asp Ser Pro Leu Phe Ala Val Pro Glu Thr Lys Thr Asn Ala
 20 25 30
 Glu Gly Ala Leu Pro Asp Gln Ala Val Ala Pro Leu Arg Phe Phe Leu
 35 40 45
 Ser Ser Leu Ala Gln Asn Gln Gln Lys Arg Arg Glu Val Ile Ala Ser
 50 55 60
 Thr Leu Ser Gly Ala Ile Gly Ser Val Cys Glu Arg Ala Ser Tyr Val
 65 70 75 80
 Ala Ala Gly Leu Glu Ala Gln Ala Val Ala Ala Ser Arg Leu Tyr Glu
 85 90 95
 Asp Ala Gln Ser Ile Met Ala Glu Ser Tyr Arg Ser Ile Ala Ala Gln
 100 105 110
 Ser Ala Asp Gly Thr Leu Leu Arg Gly Glu Val Leu Ala Arg Trp His

115 120 125
 Glu Phe
 130
 <210> 2061
 <211> 481
 <212> DNA
 <213> Homo sapiens
 <400> 2061
 gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgccatggt gtggccccag
 60
 atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag
 120
 acgccgccac ctggatgcac tgaggtgtgc acagccacgt ggagatgatg ctgggggctc
 180
 acggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggc
 240
 tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt
 300
 tgccacacgc accaggtcct gactgggagt ccggccccca gggcctgtgg atggctggcc
 360
 tgggccccagc ctccgcccc aagggtgctg gcacctggca tgtgcccagc agttggggcc
 420
 ggctgggtggg aagggtgtgtg tcaggtggcg gagcctcggt gccaggatct cactcacgcg
 480
 t
 481

<210> 2062
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2062
 Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Gly Trp Ala Gln Ala Ser
 1 5 10 15
 His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val
 20 25 30
 Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro
 35 40 45
 Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg
 50 55 60
 Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu
 65 70 75 80
 His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe Phe
 85 90 95
 Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His
 100 105 110
 Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala
 115 120 125
 Leu Leu Thr Arg Leu
 130

<210> 2063
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 2063
 gccggcgccg tcgagcgcggt gcctttcaat atcgaggccc aagacatggt gctgctcatc
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 gcggacacca atgccccgca catgctttcc gacggccaat acgcctcccg ccggggcacc
 120
 atcgagcgccg tccaatctgc cgccggttgc tccatccgcg agatctcgaa tgcggtggac
 180
 tttgccgcca ccgtcaatcc cgccgaggcg gaactctatc gccgcgcggt gcaccacgtg
 240
 gtggaagaaa ccaaccggac cctagatgcc gctaccgcgc tggcatcttc cgatctagat
 300
 acattccggc ggcttatgcy cgagagccac atctccctgc gcgaccttta tgaggtcacc
 360
 actccggagc tcgactccgt ttttaccgcy gccggcgagc tgggcgctcg catgannnn
 419

<210> 2064
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2064
 Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met
 1 5 10 15
 Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly
 20 25 30
 Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala
 35 40 45
 Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr
 50 55 60
 Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Arg Val His His Val
 65 70 75 80
 Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser
 85 90 95
 Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser
 100 105 110
 Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe
 115 120 125
 Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa
 130 135

<210> 2065
 <211> 598
 <212> DNA
 <213> Homo sapiens

<400> 2065
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 60

cgcgcgaccg ttactggatc ggcgggattg ggaaccgcag aggcattggg ccttactttc
 120
 attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccga cgccgacgtg
 180
 cttctcgaac tcgggtgtga ggatgccaaag atcacctacc ttaagccggg ccccgaacag
 240
 cgcataaatg gttcgtgtgc tgggtggcacc ggtgccttca tcgaccagat ggctaccctg
 300
 ctgcacaccg acactcccgg cctcaatgac ctgcacatccc gagccaagac catccatccg
 360
 atcgctcgc gctgtggtgt ttttgccaag tccgacctc agcccctcat taacgagggg
 420
 gcccgccacg aggatctggc tgcctcggtc ctgcaggctg tcgccactca gtgcattgcc
 480
 ggcttggcat gtggctgccc gattcgaggt aaggtcatct tccttggcgg tccgcttcc
 540
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 598

<210> 2066

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2066

Ala	Gly	Ala	Met	Ala	Ser	Leu	Leu	Ala	Asp	Ala	Ala	Asp	Ala	Leu	Pro
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Gly	Ala	Lys	Val	Arg	Ala	Thr	Val	Thr	Gly	Ser	Ala	Gly	Leu	Gly	Thr
			20					25						30	
Ala	Glu	Ala	Leu	Gly	Leu	Thr	Phe	Ile	Gln	Glu	Val	Ile	Ala	Glu	Thr
			35				40						45		
Ala	Ala	Val	Gln	Arg	Trp	Asn	Pro	Asp	Ala	Asp	Val	Leu	Leu	Glu	Leu
			50				55				60				
Gly	Gly	Glu	Asp	Ala	Lys	Ile	Thr	Tyr	Leu	Lys	Pro	Val	Pro	Glu	Gln
65					70					75				80	
Arg	Met	Asn	Gly	Ser	Cys	Ala	Gly	Gly	Thr	Gly	Ala	Phe	Ile	Asp	Gln
				85					90					95	
Met	Ala	Thr	Leu	Leu	His	Thr	Asp	Thr	Pro	Gly	Leu	Asn	Asp	Leu	Ala
			100						105					110	
Ser	Arg	Ala	Lys	Thr	Ile	His	Pro	Ile	Ala	Ser	Arg	Cys	Gly	Val	Phe
			115				120						125		
Ala	Lys	Ser	Asp	Leu	Gln	Pro	Leu	Ile	Asn	Glu	Gly	Ala	Arg	His	Glu
			130				135					140			
Asp	Leu	Ala	Ala	Ser	Val	Leu	Gln	Ala	Val	Ala	Thr	Gln	Cys	Ile	Ala
145					150					155				160	
Gly	Leu	Ala	Cys	Gly	Arg	Pro	Ile	Arg	Gly	Lys	Val	Ile	Phe	Leu	Gly
				165					170					175	
Gly	Pro	Leu	His	Phe	Met	Pro	Ser	Leu	Arg	Asp	Ala	Phe	Ser	Arg	Val
			180						185					190	
Leu	Asp	Gly	Lys	Val	Asp	Ala									
															195

<210> 2067

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2067

ttccagcaga tgctgcaaac ctggaccgcg agcggcacgc tgcaggaggc cgtggccaac
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 120
 tacttcgggt tcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg
 180
 ccgacggct acatggccag tttcaagaac ctgtgcgacc gcacgccgga gctggacttc
 240
 gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcacgga caaggacatc
 300
 gtcaacttcc acgccctggt ctggccggcg atgctcgaag gctcgggcta ccgtaaaccg
 360
 accggt
 366

<210> 2068

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2068

Phe	Gln	Gln	Met	Leu	Gln	Thr	Trp	Thr	Arg	Ser	Gly	Thr	Leu	Gln	Glu
1			5					10					15		
Ala	Val	Ala	Asn	Lys	Ile	Ala	Glu	Trp	Leu	Asp	Ala	Asp	Leu	Gln	Gln
			20					25					30		
Trp	Asp	Ile	Ser	Arg	Asp	Ala	Pro	Tyr	Phe	Gly	Phe	Glu	Ile	Pro	Gly
		35					40					45			
Glu	Pro	Gly	Lys	Tyr	Phe	Tyr	Val	Trp	Leu	Asp	Ala	Pro	Ile	Gly	Tyr
	50					55					60				
Met	Ala	Ser	Phe	Lys	Asn	Leu	Cys	Asp	Arg	Thr	Pro	Glu	Leu	Asp	Phe
65					70				75					80	
Asp	Ala	Phe	Trp	Ala	Lys	Asp	Ser	Thr	Ala	Glu	Leu	Tyr	His	Phe	Ile
			85					90					95		
Gly	Lys	Asp	Ile	Val	Asn	Phe	His	Ala	Leu	Phe	Trp	Pro	Ala	Met	Leu
		100						105					110		
Glu	Gly	Ser	Gly	Tyr	Arg	Lys	Pro	Thr	Gly						
		115					120								

<210> 2069

<211> 280

<212> DNA

<213> Homo sapiens

<400> 2069

cctagagagg atggtggaga ctgtgcgtgt gcagggtggt ccggaacctt ccctgggatg
 60
 catggggcct cgccgcaggc catctctcca gacctgggct caccctgccc ctgtgctgtt
 120
 gcctttggct ggaattccac ccagccttc ttgcctcaag aacgcccttc cccttcaga
 180

tctcatgggc acaggccccg tcttcctaaa cggggtcaga gccccagta atcatgacaa
 240
 agaccctctc ctgatcaag ctttgggtcaa gctcctaccc
 280

<210> 2070

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2070

Met	Val	Glu	Thr	Val	Arg	Val	Gln	Gly	Val	Pro	Glu	Pro	Ser	Leu	Gly
1				5					10					15	
Cys	Met	Gly	Pro	Arg	Arg	Arg	Pro	Ser	Leu	Gln	Thr	Trp	Ala	His	Pro
			20					25					30		
Ala	Pro	Val	Leu	Leu	Pro	Leu	Ala	Gly	Ile	Pro	Pro	Gln	Pro	Ser	Cys
			35				40					45			
Leu	Lys	Asn	Ala	Leu	Pro	Pro	Ser	Asp	Leu	Met	Gly	Thr	Gly	Pro	Val
	50					55					60				
Phe	Leu	Asn	Gly	Val	Arg	Ala	Pro	Ser	Asn	His	Asp	Lys	Asp	Pro	Leu
65				70					75					80	
Leu	Asp	Gln	Ala	Leu	Val	Lys	Leu	Leu	Pro						
			85						90						

<210> 2071

<211> 399

<212> DNA

<213> Homo sapiens

<400> 2071

acgcgtgtcc agcagactta gaaagcaggt tcctcttgtc atacagcacg ttaacatagc
 60
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc tttcaccttt gacttcagat
 120
 gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac
 180
 agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag
 240
 gggaggttgt caggggatga gctgctcctg aggaagaggg agagatcaag cttcactcag
 300
 cagctggatt ctcacctagt ttatagactg aaatcctgca aggtgggttac aacagtgaac
 360
 aatatgttca tacataaaga ctctaccctc aggtgatca
 399

<210> 2072

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2072

Met	Thr	Leu	Ser	Pro	Leu	Thr	Ser	Asp	Ala	Gly	Ala	Phe	Tyr	Phe	Leu
1				5					10				15		
Cys	Gln	Thr	Leu	His	Met	Lys	His	Phe	Trp	Asn	Asn	Tyr	Arg	His	Asp

20 25 30
 Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp
 35 40 45
 Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Arg Lys Arg Gln Arg
 50 55 60
 Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys
 65 70 75 80
 Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp
 85 90 95
 Ser Thr Leu Arg
 100

<210> 2073

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2073

ggatccactt ctgtgccttt ccagcttcta gaggtgcct gcgttccttg gctcgtggcc
 60
 ccttctccca ccttcaagcc agcagcggag gcctgagtc ttctcatgcc atctctctgt
 120
 tctctctctt gcctctctct ccacactgaa ggaccctgt gatcacactg gccccccac
 180
 cggatgaccc aggataatcc atctccctgt ttgaaggctg gctgattagc aaccttcatt
 240
 ccattctgct ccttcattcc ccttggccat gtaatgggat tcacagcttc tggggattag
 300
 gacatggaca tcttgtggcg ggggcataat tctgtcgac
 339

<210> 2074

<211> 85

<212> PRT

<213> Homo sapiens

<400> 2074

Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys
 1 5 10 15
 Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp
 20 25 30
 His Arg Gly Pro Ser Val Trp Arg Arg Gln Glu Arg Glu Gln Arg
 35 40 45
 Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu
 50 55 60
 Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys
 65 70 75 80
 Gly Thr Glu Val Asp
 85

<210> 2075

<211> 481

<212> DNA

<213> Homo sapiens

<400> 2075

ntggccaggt tgacctcaaa ggtgtacatt gttttatgtg gcgacaatgg actgtcagaa
 60
 accaaggagc tctcctgtcc agagaagtcc ctgtttgaaa ggaattccag acacaccttt
 120
 atcctgagcg ctctgcccactggtggcctg ctgaggaaga tccgcctctg gcacgacagc
 180
 cgtgggcctt cccagggctg gttcatcagc cacgtgatgg tgaaggagct gcacacggga
 240
 cagggtcgtt tcttcctgc ccagtgtctg ctgtctgccg gcaggcatga tggctcgtg
 300
 gagcgggagc tcacctgtct gcaaggggga ctggcttctt ggaagctttt ctattgcaag
 360
 ttcacagagt acctggagga tttccatgtc tggctgtcgg tgtacagcag gccctctcc
 420
 agccgctacc tgcacacgcc gcgccccacc gtgtccttct cctgtctgtg cgtctacgcg
 480
 t
 481

<210> 2076

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2076

Xaa	Ala	Arg	Leu	Thr	Ser	Lys	Val	Tyr	Ile	Val	Leu	Cys	Gly	Asp	Asn
1			5					10						15	
Gly	Leu	Ser	Glu	Thr	Lys	Glu	Leu	Ser	Cys	Pro	Glu	Lys	Ser	Leu	Phe
		20					25					30			
Glu	Arg	Asn	Ser	Arg	His	Thr	Phe	Ile	Leu	Ser	Ala	Pro	Ala	Gln	Leu
		35				40					45				
Gly	Leu	Leu	Arg	Lys	Ile	Arg	Leu	Trp	His	Asp	Ser	Arg	Gly	Pro	Ser
	50				55				60						
Pro	Gly	Trp	Phe	Ile	Ser	His	Val	Met	Val	Lys	Glu	Leu	His	Thr	Gly
65				70				75					80		
Gln	Gly	Trp	Phe	Phe	Pro	Ala	Gln	Cys	Trp	Leu	Ser	Ala	Gly	Arg	His
		85					90						95		
Asp	Gly	Arg	Val	Glu	Arg	Glu	Leu	Thr	Cys	Leu	Gln	Gly	Gly	Leu	Gly
		100				105						110			
Phe	Trp	Lys	Leu	Phe	Tyr	Cys	Lys	Phe	Thr	Glu	Tyr	Leu	Glu	Asp	Phe
	115					120						125			
His	Val	Trp	Leu	Ser	Val	Tyr	Ser	Arg	Pro	Ser	Ser	Ser	Arg	Tyr	Leu
	130				135					140					
His	Thr	Pro	Arg	Pro	Thr	Val	Ser	Phe	Ser	Leu	Leu	Cys	Val	Tyr	Ala
145				150					155						160

<210> 2077

<211> 1410

<212> DNA

<213> Homo sapiens

<400> 2077

ncagagtgtt ttgagctatc tggatatccca aatgatgtga atactttcag aaaccaatgg
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caaattgaac ccaactgttt gcgaattcgg cacgagtaaa gatctttttt ttttttttgt
120
tttttttttt tttttttttt ttttgctttc taaagtggct ttaatatcac acaagcgggt
180
ctttgggtcta cagtgaagaga aaacagaggg agccaggaaa ggctccccgc tggcctctgg
240
agtccaggag ccttaggaag gctgaaacaa gccctgacca gcaggcttag ttgtcctgag
300
aagagccagt gaggccacct ggtccagttc accaggtttc ccagggaagc acaggcatct
360
ctgggtcccc gagcacagtg ccagggaaga ccccccaat ccccatctga acaggccgag
420
ggcagcatgg gaaaggctca gactgcaggt tcatcccgca ggatggtaag gacacgtgct
480
cctccctcgc aagagcaggc ttgtgcacag cccggcacag ggccagccag ggcggccccct
540
ggggctgtgc agcgcttacc agggggagga gttcagccat caggaccttt tccaagtggg
600
tctgctggtc cagcacagcc actcgcagct tgagggccgc cagggtctgc agctcctggg
660
tgctggagta gacaagcagc tgggnnggct ccatgcaggc tccgctctac cccacagga
720
cggcgaggct cgggggggcc tnnccccaca gacatggtct tggtaggtgt tccgccaccg
780
ctgcacgcag ctctgcagc ctgtgcagac actggccac catggcctgc agcccccca
840
gcgtgagcag gcagcggtac tctgcaccc agtccatggg ggctgctgag agctcctccc
900
tcatgcgcag tctcagcagc gagcaggcct tccgcaggcg ccccgccctc gctccacct
960
ccacagcact gagcctgggc tggggcccgcc ctgaagctgt ctgcatgttc tggaggaact
1020
gggttttggc agcggcgcca tccgtggaat cactgggtctg tgtggaactg agctggggcc
1080
acaggctcga gttctgggaa gctgctttcc tgaatgccgc aggcagccgc agcagggtgc
1140
ccttctcctt gagtgtgaag gcttctgggg cctgaggagc agcggatggg gccatttgc
1200
ggtcctctgag gcccgcccca ggctggggg ttcgggctcc catcccaaca cgggtcccat
1260
ccccactga cagcagccgg cgctcagggt ggcccttggc aggcaccgtg gtctggcgga
1320
ggcccttggg ggggtctctg tctgaagcat ggccaccagc ttggcctggg gaatgcgggtg
1380
gggcggaggc tgtcgtgcc gaagaggtga
1410

<210> 2078

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser
 1 5 10 15
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser
 20 25 30
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser
 35 40 45
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys
 50 55 60
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln
 65 70 75 80
 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly
 85 90 95
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala
 100 105

<210> 2079

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2079

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 gtactggcgg tcaaatccta caaacgcatt accttcaacg agatcactct caagcgcgtt
 120
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gaggtagcctc acaggaatgc
 180
 cggcgtgtgc ttgaccgctt ggtggggtac ctggtgaccc aagagttgcg gcgcctgatg
 240
 ggcaaaccta cttccgctgg ccgcgttcaa tcaccgcgcg tgtttcttgt ggtcttgccg
 300
 gaacgcgaga tccgcaactt tcagggtgatc aatcactttg gcgtgcgtct gttctttgcc
 360
 gatgtaagtc ggggcaccac ttggtatgcc gaggggcaac cggtagccgga tttagcaagc
 420
 aagcatttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat
 480
 gtggctcgtg agtctctgca ggatcgcaag gccgagcgtc atcctcctgc accattcatc
 540
 tcatccactc ttcaacaggc cgcca
 565

<210> 2080

<211> 188

<212> PRT

<213> Homo sapiens

<400> 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp
 1 5 10 15
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe
 20 25 30
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg

35 40 45
 Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
 50 55 60
 Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
 65 70 75 80
 Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
 85 90 95
 Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
 100 105 110
 Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
 115 120 125
 Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
 130 135 140
 Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
 145 150 155 160
 Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
 165 170 175
 Ala Pro Phe Ile Ser Ser Thr Leu Gln Ala Ala
 180 185

<210> 2081

<211> 319

<212> DNA

<213> Homo sapiens

<400> 2081

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 aggttccatc atcaacgggt tccactagta attttggtgt gtggaactgc ctgtactgga
 120
 aaatcaacaa tcgctacaca acttgctcag aggcctcaatt tgcctaattgt tttgcagacg
 180
 gacatgggtg atgagctgct gcggacatca acagatgcgc cacttacttc agttcctgtg
 240
 tgggctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
 300
 gttgtacgca aggggttgg
 319

<210> 2082

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2082

Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
 1 5 10 15
 Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
 20 25 30
 Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
 35 40 45
 Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
 50 55 60
 Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

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65              70              75              80
Trp Ala Arg Asp Phe Asn Ser Pro Glu Glu Leu Ile Thr Glu Phe Cys
              85              90              95
Arg Glu Cys Arg Val Val Arg Lys Gly Leu
              100              105

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<210> 2083
 <211> 382
 <212> DNA
 <213> Homo sapiens

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<400> 2083
nngcctgatt gcgacatggc cgctcgagtgc gctgtaacac gcaagcagct atataccatc
60
atacctactg ttgaatgcaa ctgtggccac gttttctgct ttggctgtgg tttggatgga
120
caccagccgg tcatttgtgc tgttgtccgc ttgtggctga aaaaatgtgc ggatgacagt
180
gagacgtcca actggatcgg cgctaatacc aaggaatgcc ccaaagtctg ttcgacgatt
240
gaaaagaatg gcggatgtaa tcatatgacg tgtcgcaagt gcaaatacga attttgttgg
300
atttgctcgg gcccatggtc ggagcacgga aacaactatt acaactgcaa tcggtacgat
360
gaaaaggcag gagatgaagg tn
382

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<210> 2084
 <211> 127
 <212> PRT
 <213> Homo sapiens

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<400> 2084
Xaa Pro Asp Cys Asp Met Ala Val Glu Cys Ala Val Thr Arg Lys Gln
1              5              10              15
Leu Tyr Thr Ile Ile Pro Thr Val Glu Cys Asn Cys Gly His Val Phe
              20              25              30
Cys Phe Gly Cys Gly Leu Asp Gly His Gln Pro Val Ile Cys Ala Val
              35              40              45
Val Arg Leu Trp Leu Lys Lys Cys Ala Asp Asp Ser Glu Thr Ser Asn
50              55              60
Trp Ile Gly Ala Asn Thr Lys Glu Cys Pro Lys Cys Cys Ser Thr Ile
65              70              75              80
Glu Lys Asn Gly Gly Cys Asn His Met Thr Cys Arg Lys Cys Lys Tyr
              85              90              95
Glu Phe Cys Trp Ile Cys Ser Gly Pro Trp Ser Glu His Gly Asn Asn
100              105              110
Tyr Tyr Asn Cys Asn Arg Tyr Asp Glu Lys Ala Gly Asp Glu Gly
115              120              125

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<210> 2085
 <211> 478
 <212> DNA
 <213> Homo sapiens

<400> 2085

nmggatccca aagaccgcga tattgccatg gtgttccaaa actatgccct ctaccgcac
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atgactgtcg ccgacaacat gggttttgcc ctcaaactgg cgaaagtgga taagaaagaa
120
atccggcgtc gcgtggagga agccgccgaa ctctcgacc tcaccgacta tctggaccgc
180
aaacccaagg cactctccgg tggccagcgg cagcgcgctg ccatggggcg cgctattgtt
240
cgttcccccc gcgtcttctt gatggacgag cctctttcta acctggatgc gcgtctgcgt
300
gtccgcaccc gcgccagat tgcggaactg cagcgccgcc tgggcaccac caccgtttat
360
gtcaccatg accaggtgga ggctatgacg atgggggatc gtgtggtgt tctctgtgcc
420
gggaaactgc agcaggtgga tactccacgt aatcttttcg accacccgc taacgcgt
478

<210> 2086

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2086

Xaa	Asp	Pro	Lys	Asp	Arg	Asp	Ile	Ala	Met	Val	Phe	Gln	Asn	Tyr	Ala
1				5					10					15	
Leu	Tyr	Pro	His	Met	Thr	Val	Ala	Asp	Asn	Met	Gly	Phe	Ala	Leu	Lys
			20					25					30		
Leu	Ala	Lys	Val	Asp	Lys	Lys	Glu	Ile	Arg	Arg	Arg	Val	Glu	Glu	Ala
		35					40					45			
Ala	Glu	Leu	Leu	Asp	Leu	Thr	Asp	Tyr	Leu	Asp	Arg	Lys	Pro	Lys	Ala
	50					55					60				
Leu	Ser	Gly	Gly	Gln	Arg	Gln	Arg	Val	Ala	Met	Gly	Arg	Ala	Ile	Val
65				70					75					80	
Arg	Ser	Pro	Arg	Val	Phe	Leu	Met	Asp	Glu	Pro	Leu	Ser	Asn	Leu	Asp
			85						90				95		
Ala	Arg	Leu	Arg	Val	Arg	Thr	Arg	Ala	Gln	Ile	Ala	Glu	Leu	Gln	Arg
		100						105					110		
Arg	Leu	Gly	Thr	Thr	Thr	Val	Tyr	Val	Thr	His	Asp	Gln	Val	Glu	Ala
		115				120						125			
Met	Thr	Met	Gly	Asp	Arg	Val	Ala	Val	Leu	Cys	Ala	Gly	Lys	Leu	Gln
	130					135					140				
Gln	Val	Asp	Thr	Pro	Arg	Asn	Leu	Phe	Asp	His	Pro	Ala	Asn	Ala	
145					150					155					

<210> 2087

<211> 731

<212> DNA

<213> Homo sapiens

<400> 2087

gataattctc tacacggcat gagctgggga cgtaccccc ttgccaacgt cacctcacgg
60

tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt
 120
 aaaagaaaa gcattgcgtc ggccaagaat tgctgtcgct gctgcaacgg ctactgcgtc
 180
 ggtcggatca atcgcagcaa tcacccctc cccagggcag aagctaactc caataggcca
 240
 cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc
 300
 cgtgatgcag tcatcaacga tgcaaagctg cgtgccgga ttgccggtgc gttggttaag
 360
 gctggattta gttccgccga cgcggtggct ctacgcccgc gtattgccag agaaatggca
 420
 aaagagggcg tcctctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg
 480
 ggtctgctca ctgatgcgaa gatccagcgt gctgccgctg cagtggacct cggcatcaaa
 540
 gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg
 600
 gtggtcgcaa atcttgtcgc cgccggtctg acaagaagtt ggcaaaggct acggctgtcg
 660
 ccattgccgc aactgcgctc aatcccgcgc tcgggccgat cgcaaagact gaggccatta
 720
 aggtgagat c
 731

<210> 2088

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2088

Met	Ala	Lys	Glu	Gly	Val	Leu	Leu	Ile	Asn	His	His	Lys	Leu	Lys	Ala
1				5					10					15	
Leu	Ile	Gly	Ala	Gln	Val	Gly	Leu	Leu	Thr	Asp	Ala	Lys	Ile	Gln	Arg
			20				25						30		
Ala	Ala	Ala	Ala	Val	Asp	Leu	Gly	Ile	Lys	Ala	Thr	Leu	Ala	Ala	Thr
		35					40					45			
Ile	Ile	Pro	Asn	Ala	Leu	His	Ser	Ala	Ala	Phe	Lys	Asp	Ala	Val	Val
	50					55					60				
Ala	Asn	Leu	Val	Ala	Ala	Gly	Leu	Thr	Arg	Ser	Trp	Gln	Arg	Leu	Arg
65					70				75					80	
Leu	Ser	Pro	Leu	Pro	Gln	Leu	Arg	Ser	Ile	Pro	Leu	Ser	Gly	Arg	Ser
				85				90						95	
Gln	Arg	Leu	Arg	Pro	Leu	Arg	Leu	Arg							
				100				105							

<210> 2089

<211> 315

<212> DNA

<213> Homo sapiens

<400> 2089

accggtgtgg accaggctca gctgcgcgac gccatgtttt cctaccttcc ccaccacaag
 60

ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attcccgta gccatcatc
 120
 ttcgacaccg accacttcga ggggtacgag cgcccccgcc tcgtgctgca cgaagtcacc
 180
 gatcaacttg gccaaagcgtt ccttgatttg gaaggcccag agccggctct cggctgggaa
 240
 tcgttggtgg cgtctctcac gagtcttgtc gactctatgg ggatccgtct gaccggcatt
 300
 accgattcga tcccc
 315

<210> 2090

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2090

Thr	Gly	Val	Asp	Gln	Ala	Gln	Leu	Arg	Asp	Ala	Met	Phe	Ser	Tyr	Leu
1			5						10					15	
Pro	His	His	Lys	Leu	Gly	Glu	Phe	Asp	Ile	Asp	Leu	Leu	Leu	Asp	His
			20					25					30		
Arg	Asp	Ser	Arg	Gln	Pro	Ile	Ile	Phe	Asp	Thr	Asp	His	Phe	Glu	Gly
		35				40						45			
Tyr	Glu	Arg	Pro	Arg	Leu	Val	Leu	His	Glu	Val	Thr	Asp	Gln	Leu	Gly
	50					55					60				
Gln	Ala	Phe	Leu	Val	Leu	Glu	Gly	Pro	Glu	Pro	Ala	Leu	Gly	Trp	Glu
65				70					75				80		
Ser	Leu	Val	Ala	Ser	Leu	Thr	Ser	Leu	Val	Asp	Ser	Met	Gly	Ile	Arg
			85					90					95		
Leu	Thr	Gly	Ile	Thr	Asp	Ser	Ile	Pro							
		100					105								

<210> 2091

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2091

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 120
 agtctctgtc tcttttgtct ctgtctctct ctgtgtctct gccattttg gtctctgtct
 180
 tctttcctct gtgtgtctct ccatttctgt ctctcttctt ctgtctctct ccatttctgt
 240
 ctctgtctct tttctctctg tgtgtctctt ttgtctctct gtttctctgc gtgtctctgt
 300
 ccatttctgt cccttcacgc gt
 322

<210> 2092

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2092

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Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu
 1             5             10             15
Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala
      20             25             30
His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys
      35             40             45
Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys
      50             55             60
Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys
      65             70             75             80
Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Leu Ser Leu Cys Phe Ser
      85             90             95
Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala
      100             105

```

<210> 2093

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2093

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tttgtggtgg cctaccgcgc agagaccag gagatggtgc tcgatgcgca taaccgcgc
120
tttgcttct ttggcgcgct accgcagcgg gttatctacg acaaccttaa aaccgcagtg
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttctggc gttggctaat
240
cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagtt
300
gagaatcaag ttgcacaat acgc
324

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<210> 2094

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2094

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Ala Gly Val Met Gln Thr Ile Lys Val Ala Gln Phe Arg Leu Cys His
 1             5             10             15
Ser Arg Lys Met Phe Val Val Ala Tyr Pro Arg Glu Thr Gln Glu Met
      20             25             30
Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Gly Gly Val Pro
      35             40             45
Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu
      50             55             60
Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn
      65             70             75             80
His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

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85 90 95
 Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg
 100 105

<210> 2095

<211> 402

<212> DNA

<213> Homo sapiens

<400> 2095

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 120
 cgcgtggtgg gcgtgggttc agtgggcacc cactccctgg tactgctact gtcgggcccc
 180
 aatgatgaac ctcttgtgct gcaagtgaag gaagccctcc ccagtgtcct caccacccat
 240
 gggaaactgc cggatgcttt ttcggaactg tccgctgggg actcctccgg gctcctcccc
 300
 gataatcttg ataagcatat taaagccggc aatggctacc ggggtggtggc gtgccagcag
 360
 attctgcagg ccactcgga tccgctgctg ggggtggacgc gt
 402

<210> 2096

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2096

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 Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Leu Lys Gln
 20 25 30
 Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val
 35 40 45
 Gly Thr His Ser Leu Val Leu Leu Ser Gly Pro Asn Asp Glu Pro
 50 55 60
 Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His
 65 70 75 80
 Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser
 85 90 95
 Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly
 100 105 110
 Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro
 115 120 125
 Leu Leu Gly Trp Thr Arg
 130

<210> 2097

<211> 641

<212> DNA

<213> Homo sapiens

<400> 2097

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 120
 gccatgagca aggaggaggc cgaccaggta ctgggcgtgc agctggggct gtctgtccgc
 180
 caccgcctc cagcctcac ttcaggctcc ctcccagcca ggcgtgggccc tggccctcac
 240
 tgctgctgct ccacatgctg tcaactgtct cctccccagt cctgcctcat cctcacnccg
 300
 ccgtccctct gegtgtcact ctctgcctgt cctcactggg tcagggaacc ccagcctctc
 360
 tttattcggc tctatctgac cctggctctg cctctgactc tgcctctggc cctcccgtc
 420
 atgcccctca cactctctct cccccagccc ccgtcctgcg gcccagagga cgacgccag
 480
 ctccagctgg cccttagttt gagccgagaa gagcatgata aggtcagagc agcctccctg
 540
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 641

<210> 2098

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2098

Xaa	Phe	Leu	Thr	Arg	Pro	Pro	Ala	Ser	Ser	Ala	Ala	Val	Gly	Ser	Gly
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Pro	Pro	Pro	Glu	Ala	Glu	Gln	Ala	Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu
			20					25					30		
Glu	Leu	Gln	Leu	Gln	Leu	Ala	Leu	Ala	Met	Ser	Lys	Glu	Glu	Ala	Asp
		35					40					45			
Gln	Val	Leu	Gly	Val	Gln	Leu	Gly	Leu	Ser	Val	Arg	His	Pro	Pro	Pro
	50					55					60				
Arg	Leu	Thr	Ser	Gly	Ser	Leu	Pro	Ala	Arg	Arg	Gly	Pro	Gly	Pro	His
65					70					75				80	
Cys	Arg	Cys	Ser	Thr	Cys	Cys	His	Ser	Ser	Pro	Pro	Gln	Ser	Cys	Leu
				85					90				95		
Ile	Leu	Thr	Pro	Pro	Ser	Leu	Cys	Val	Ser	Leu	Ser	Ala	Cys	Pro	His
			100					105					110		
Trp	Phe	Arg	Asp	Pro	Gln	Pro	Leu	Phe	Ile	Arg	Leu	Tyr	Leu	Thr	Leu
	115						120					125			
Ala	Leu	Pro	Leu	Thr	Leu	Pro	Leu	Ala	Pro	Pro	Val	Met	Pro	Leu	Thr
	130					135					140				
Leu	Ser	Leu	Pro	Gln	Pro	Pro	Ser	Cys	Gly	Pro	Glu	Asp	Asp	Ala	Gln
145				150						155				160	
Leu	Gln	Leu	Ala	Leu	Ser	Leu	Ser	Arg	Glu	Glu	His	Asp	Lys	Val	Arg
			165					170				175			
Ala	Ala	Ser	Leu	Ser	Leu	Pro	Leu	Pro	Gly	Ala	Pro	Leu	Arg	Pro	Ala

180 185 190
 Pro Ser Pro Leu Pro Lys Ser Pro Pro Thr Ile Leu Leu Gly Pro Lys
 195 200 205
 Pro Thr Gly Ser Arg
 210

<210> 2099
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 2099
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 120
 agcacctgcc cacggggtgc tcagtggagg cagtgccag ggctgctgtg cccacgtgtg
 180
 tgccctcaga catecctccc cagacacttg ctgcatgacc caggaggtgg caggcagtgg
 240
 cagtattctg ttcaggtgag ctgagagtg gcaggtgcct ggctgcggcc ctgcctcact
 300
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 347

<210> 2100
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2100
 Met Asp Ser Thr Cys Pro Gln Gly Cys Ser Val Glu Ala Val Pro Arg
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 Ala Ala Val Pro Met Arg Val Pro Cys Pro Leu Pro Asp Ala Asp Ser
 20 25 30
 Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys
 35 40 45
 Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp
 50 55 60
 Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu
 65 70 75 80
 Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala
 85 90 95
 Ser Ser Pro Leu Ala His Pro Thr Trp Pro
 100 105

<210> 2101
 <211> 549
 <212> DNA
 <213> Homo sapiens

<400> 2101
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120
ggttgaacca cgacaagaat gagttgctgg ccagccttct catccacctt gacgagctat
180
taacagtgtg gttggagacc ggaacggtgc gggatcagta tgtggccgc tgtgacacca
240
ttggtactcc ggtccgtctg accttcgacc cagaaatcgt ggggtggtggt gagggggcca
300
ttgagggcat cgggtgctgac gttgacgttg atggcgctat cgtggtggaa acttctgacg
360
ggcgtcgcag tttcaacgct gctgacgttc atcatttgcg aaccagggtga gttccgctac
420
ggcgtcctga gcgttccac catctagact gctgactatg acgaccaca ttttggccct
480
tggtggtggc ggtttctega tgtcgaaccg cggtgagcct accgctctcg accgtcacat
540
ccctgacct
549

<210> 2102

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2102

Met	Gly	Arg	Asp	Glu	Leu	Pro	Leu	Pro	Thr	Ala	Thr	Ser	Leu	Ala	Leu
1				5					10					15	
Cys	Gly	Leu	Asn	His	Asp	Lys	Asn	Glu	Leu	Leu	Ala	Ser	Leu	Leu	Ile
			20					25					30		
His	Leu	Asp	Glu	Leu	Leu	Thr	Val	Trp	Leu	Glu	Thr	Gly	Thr	Val	Arg
			35				40					45			
Asp	Gln	Tyr	Val	Ala	Arg	Cys	Asp	Thr	Ile	Gly	Thr	Pro	Val	Arg	Leu
	50					55				60					
Thr	Phe	Asp	Pro	Glu	Ile	Val	Gly	Gly	Gly	Glu	Gly	Ala	Ile	Glu	Gly
65				70						75				80	
Ile	Gly	Val	Asp	Val	Asp	Val	Asp	Gly	Ala	Ile	Val	Val	Glu	Thr	Ser
			85					90					95		
Asp	Gly	Arg	Arg	Ser	Phe	Asn	Ala	Ala	Asp	Val	His	His	Leu	Arg	Thr
			100					105					110		

Arg

<210> 2103

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2103

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120
tgaggagggg acgcatatcg gtacgaccag gttggtatgg aaatcaaagg gaatgacgtc
180

ggtatcgtcg gatcgggagc ggtcgggtgc cgggttgagg ctgtgatggc ggccatgggt
 240
 gcgaccgtgc gtgtcttcga cccgtggggc actcctgatt cttttccagc tggcgtgatg
 300
 gcatgtgatg atctcgatga ggttctgagg ctcagccgca tctcactct ccacgtcgt
 360
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 420
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 459

<210> 2104

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2104

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His	Thr	Ile	Ala	Met	Ile	Met	Ala	Ala	Val	Arg	Gln	Ile	Pro	Ala	His
		20					25					30			
His	Glu	Leu	Leu	Ala	Ser	Gly	Val	Trp	Glu	Gly	Asp	Ala	Tyr	Arg	Tyr
	35					40					45				
Asp	Gln	Val	Gly	Met	Glu	Ile	Lys	Gly	Asn	Asp	Val	Gly	Ile	Val	Gly
	50					55					60				
Cys	Gly	Ala	Val	Gly	Cys	Arg	Val	Ala	Ala	Val	Met	Ala	Ala	Met	Gly
65					70					75				80	
Ala	Thr	Val	Arg	Val	Phe	Asp	Pro	Trp	Ala	Thr	Pro	Asp	Ser	Phe	Pro
		85					90						95		
Ala	Gly	Val	Met	Ala	Cys	Asp	Asp	Leu	Asp	Glu	Val	Leu	Arg	Leu	Ser
		100					105					110			
Arg	Ile	Leu	Thr	Leu	His	Ala	Arg	Ala	Asn	Glu	Asp	Asn	Arg	His	Met
	115					120					125				
Ile	Gly	Val	Glu	Gln	Leu	Ala	Glu	Met	Pro	Asp	Gly	Ser	Val	Leu	Val
	130					135					140				
Asn	Cys	Ala	Arg	Gly	Ser	Leu	Val	Asp							
145						150									

<210> 2105

<211> 4057

<212> DNA

<213> Homo sapiens

<400> 2105

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 120
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 180
 aagtttgggc aaaacattaa cctgacaaag cttgattccg gaaaaaaatc cctcaagagc
 240
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 300

cggtggcacc tagaggggag aggggtgcagg ctttgaagcc agaaagacat ggatgcaagt
360
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660
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720
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840
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960
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1020
acagcagcca cggttctgca gcagggcagc ttcagtgtgg atgacgtgca gactgtgagt
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1140
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1200
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1560
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1620
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1680
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1740
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1800
accaaactct tttttaaaat tagaattaac aagaaaaaaa aaagggtggg gtttatgagc
1860
cttagttctt ggaggattat aagagtactt cccagtttt gaggtctggac agttaatata
1920

ctttatatca attatacatt taatataatt taatttaaaa taatttaaag attcttagga
1980
gatagtctga ctttctgac ctagatggga atgatcagat agggattttt tttgtggcac
2040
aggctaaatt tgatgggtgac atttatattg ttgagaatgt tacatcttat tttaccacaa
2100
cttttaaaaa atgttacatc ttttgcagta ggatcagttg tgaggcacat agtagctgag
2160
gctccatgga gccaccttcc atttctttca gtcagagagg aggacagtct ctgtctctgc
2220
atttctgggtg tcttgcttgt cgggtggcaga gccatgcttg ccggcatttg cttaggtggc
2280
catagtagtt gctaagtga cagggtgactg ggcagggatg ggaggtggcc acaggtcaga
2340
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2400
aagctccctg gtgcagctgc agctgtgggt ggaggtagag aagccagcaa gaccttggtc
2460
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<210> 2106

<211> 240

<212> PRT

<213> Homo sapiens

<400> 2106

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			20					25					30		
Gln	Ser	Glu	Leu	Thr	Asn	Met	Asp	Leu	Ala	Ala	Leu	Phe	Ser	Asp	Thr
		35					40					45			
Pro	Ala	Asn	Ala	Ser	Gly	Ser	Ala	Gly	Gly	Ser	Asp	Glu	Ala	Leu	Asn
		50				55					60				
Ser	Gly	Ile	Leu	Thr	Ile	Asp	Val	Thr	Ser	Val	Ser	Ser	Ser	Leu	Gly
65					70					75				80	
Gly	Asn	Leu	Pro	Ala	Asn	Asn	Ser	Ser	Leu	Gly	Pro	Met	Glu	Pro	Leu
			85					90					95		
Val	Leu	Val	Ala	His	Ser	Asp	Ile	Pro	Pro	Ser	Leu	Asp	Ser	Pro	Leu
			100					105					110		
Val	Leu	Gly	Thr	Ala	Ala	Thr	Val	Leu	Gln	Gln	Gly	Ser	Phe	Ser	Val
		115					120					125			
Asp	Asp	Val	Gln	Thr	Val	Ser	Ala	Gly	Ala	Leu	Gly	Cys	Leu	Val	Ala
		130					135					140			
Leu	Pro	Met	Lys	Asn	Leu	Ser	Asp	Asp	Pro	Leu	Ala	Leu	Thr	Ser	Asn
145					150					155				160	
Ser	Asn	Leu	Ala	Ala	His	Ile	Thr	Thr	Pro	Thr	Ser	Ser	Ser	Thr	Pro
				165					170					175	
Arg	Glu	Asn	Ala	Ser	Val	Pro	Glu	Leu	Leu	Ala	Pro	Ile	Lys	Val	Glu
			180					185					190		
Pro	Asp	Ser	Pro	Ser	Arg	Pro	Gly	Ala	Val	Gly	Gln	Gln	Glu	Gly	Ser
		195					200					205			
His	Gly	Leu	Pro	Gln	Ser	Thr	Leu	Pro	Ser	Pro	Ala	Glu	Gln	His	Gly
		210					215				220				
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225

230

235

240

<210> 2107

<211> 305

<212> DNA

<213> Homo sapiens

<400> 2107

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120

gcctcaggcc tgggtgtctga aaacaccccc agacctgatg acagcagagc tatcgctcca
180

gcctccctcc aaatcaccag ttcttgttct ggtgaacccc tggacctgga ttccaaggat
240

gtctcaaggc ctgactcaca ggggcgcctc tgtccagcct caaaccccat tctggccenn
300

ccnncn

305

<210> 2108

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2108

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Leu Val Pro Asp Leu Asn Asp Ser Leu Ser Pro Val Ser Gly Glu Ala
20 25 30

Ser Gly Leu Val Ser Glu Asn Thr Pro Arg Pro Asp Asp Ser Arg Ala
35 40 45

Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro
50 55 60

Leu Asp Leu Asp Ser Lys Asp Val Ser Arg Pro Asp Ser Gln Gly Arg
65 70 75 80

Leu Cys Pro Ala Ser Asn Pro Ile Leu Ala Xaa Pro
85 90

<210> 2109

<211> 700

<212> DNA

<213> Homo sapiens

<400> 2109

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120

taccaagcgt ccagttaggc tccccagcgc aaacggagga acgaaacttc atttctccca
180

gccaaagaaaa ctagtgttaa agaaactcag aggactttta aggggaacgc acaaaaaatg
240

ttttctccaa agaagcattc ggtagcaca agtgatagaa accaggagga gagacagtgc
 300
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 360
 gtaaagcagg tgcaagaaaa agtgtttact tcagctgctt ttcattgagct gggcctccac
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 480
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<210> 2110

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2110

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Asp	Asn	Pro	Arg	Thr	Phe	Ser	Arg	Arg	Pro	Pro	Ala	Gln	Ala	Ser	Arg
			20					25					30		
Gln	Ala	Lys	Ala	Thr	Lys	Arg	Lys	Tyr	Gln	Ala	Ser	Ser	Glu	Ala	Pro
		35					40					45			
Pro	Ala	Lys	Arg	Arg	Asn	Glu	Thr	Ser	Phe	Leu	Pro	Ala	Lys	Lys	Thr
		50				55					60				
Ser	Val	Lys	Glu	Thr	Gln	Arg	Thr	Phe	Lys	Gly	Asn	Ala	Gln	Lys	Met
65					70					75				80	
Phe	Ser	Pro	Lys	Lys	His	Ser	Val	Ser	Thr	Ser	Asp	Arg	Asn	Gln	Glu
				85					90					95	
Glu	Arg	Gln	Cys	Ile	Lys	Thr	Ser	Ser	Leu	Phe	Lys	Asn	Asn	Pro	Asp
			100					105					110		
Ile	Pro	Glu	Leu	His	Arg	Pro	Val	Val	Lys	Gln	Val	Gln	Glu	Lys	Val
		115					120						125		
Phe	Thr	Ser	Ala	Ala	Phe	His	Glu	Leu	Gly	Leu	His	Pro	His	Leu	Ile
		130				135					140				
Ser	Thr	Ile	Asn	Thr	Val	Leu	Lys	Met	Ser	Ser	Met	Thr	Ser	Val	Gln
145					150					155				160	
Lys	Gln	Ser	Ile	Pro	Val	Leu	Leu	Glu	Gly	Arg	Asp	Ala	Leu	Val	Arg
			165						170					175	
Ser	Gln	Thr	Gly	Ser	Gly	Lys	Ile	Leu	Ala	Tyr	Cys	Ile	Pro	Val	Val
			180				185						190		
Gln	Ser	Leu	Gln	Ala	Met	Glu	Ser	Lys	Ile	Gln	Arg	Ser	Asp	Gly	Pro
		195					200					205			
Tyr	Ala	Leu	Val	Leu	Val	Pro	Thr	Arg	Glu	Val	Ser	Arg	Leu	Pro	Phe
	210					215					220				
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225					230										

<210> 2111

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2111

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120
gccgagctgg tggccctggc tgagctgttc atgccaatca agctggtgcc gaagcaattt
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240
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339

<210> 2112

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2112

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Ala	Val	Ser	Asp	Gln	Met	Glu	Ile	Thr	Arg	Lys	Ala	Leu	Lys	Lys	His
		20					25					30			
Gly	Arg	Gly	Asn	Lys	Leu	Ala	Ile	Ala	Glu	Leu	Val	Ala	Leu	Ala	Glu
	35					40					45				
Leu	Phe	Met	Pro	Ile	Lys	Leu	Val	Pro	Lys	Gln	Phe	Glu	Gly	Leu	Val
	50				55					60					
Glu	Arg	Val	Arg	Ser	Ala	Leu	Glu	Arg	Leu	Arg	Ala	Gln	Glu	Arg	Ala
65				70				75				80			
Ile	Met	Gln	Leu	Cys	Val	Arg	Asp	Ala	Arg	Met	Pro	Arg	Ala	Asp	Phe
		85					90					95			
Leu	Arg	Gln	Phe	Pro	Gly	Asn	Glu	Val	Asp	Glu	Ser	Trp	Thr	Asp	Ala
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Leu

<210> 2113

<211> 2329

<212> DNA

<213> Homo sapiens

<400> 2113

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180

attttgcaact tctgtcaaaa actgagaaac caaacattct tttaccagac tgatgaacag
240
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360
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 2220
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<210> 2114

<211> 758

<212> PRT

<213> Homo sapiens

<400> 2114

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Leu	His	Met	Pro	Ile	Thr	Val	Ile	Trp	Gly	Val	Ser	Pro	Glu	Asp	Asn
			20					25					30		
Gly	Asn	Pro	Leu	Asn	Pro	Lys	Ser	Lys	Gly	Lys	Leu	Thr	Leu	Asp	Ser
			35					40					45		
Ser	Phe	Asn	Ile	Ala	Ser	Pro	Ala	Ser	Gln	Ala	Trp	Ile	Leu	His	Phe
			50					55					60		
Cys	Gln	Lys	Leu	Arg	Asn	Gln	Thr	Phe	Phe	Tyr	Gln	Thr	Asp	Glu	Gln
65						70				75				80	
Asp	Phe	Thr	Ser	Cys	Phe	Ile	Glu	Thr	Phe	Lys	Gln	Trp	Met	Glu	Asn
				85						90				95	
Gln	Asp	Cys	Asp	Glu	Pro	Ala	Leu	Tyr	Pro	Cys	Cys	Ser	His	Trp	Ser
			100					105					110		
Phe	Pro	Tyr	Lys	Gln	Glu	Ile	Phe	Glu	Leu	Cys	Ile	Lys	Arg	Ala	Ile
			115					120					125		
Met	Glu	Leu	Glu	Arg	Ser	Thr	Gly	Tyr	His	Leu	Asp	Ser	Lys	Thr	Pro
			130					135					140		
Gly	Pro	Arg	Phe	Asp	Ile	Asn	Asp	Thr	Ile	Arg	Ala	Val	Val	Leu	Glu
145						150				155				160	
Phe	Gln	Ser	Thr	Tyr	Leu	Phe	Thr	Leu	Ala	Tyr	Glu	Lys	Met	His	Gln
				165						170				175	
Phe	Tyr	Lys	Glu	Val	Asp	Ser	Trp	Ile	Ser	Ser	Glu	Leu	Ser	Ser	Ala
			180					185					190		
Pro	Glu	Gly	Leu	Ser	Asn	Gly	Trp	Phe	Val	Ser	Asn	Leu	Glu	Phe	Tyr
			195					200					205		
Asp	Leu	Gln	Asp	Ser	Leu	Ser	Asp	Gly	Thr	Leu	Ile	Ala	Met	Gly	Leu
			210					215					220		
Ser	Val	Ala	Val	Ala	Phe	Ser	Val	Met	Leu	Leu	Thr	Thr	Trp	Asn	Ile

225					230					235				240
Ile	Ile	Ser	Leu	Tyr	Ala	Ile	Ile	Ser	Ile	Ala	Gly	Thr	Ile	Phe
					245					250				255
Thr	Val	Gly	Ser	Leu	Val	Leu	Leu	Gly	Trp	Glu	Leu	Asn	Val	Leu
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Ser	Val	Thr	Ile	Ser	Val	Ala	Val	Gly	Leu	Ser	Val	Asp	Phe	Ala
					275									285
His	Tyr	Gly	Val	Ala	Tyr	Arg	Leu	Ala	Pro	Asp	Pro	Asp	Arg	Glu
					290									300
Lys	Val	Ile	Phe	Ser	Leu	Ser	Arg	Val	Gly	Ser	Ala	Met	Ala	Met
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Ala	Leu	Thr	Thr	Phe	Val	Ala	Gly	Ala	Met	Met	Ile	Pro	Ser	Thr
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Leu	Ala	Tyr	Thr	Gln	Leu	Gly	Thr	Phe	Met	Met	Leu	Ile	Met	Cys
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Ser	Trp	Ala	Phe	Ala	Thr	Phe	Phe	Phe	Gln	Cys	Met	Cys	Arg	Cys
					340									365
Gly	Pro	Gln	Gly	Thr	Cys	Gly	Gln	Ile	Pro	Leu	Pro	Lys	Lys	Leu
					355									380
Cys	Ser	Ala	Phe	Ser	His	Ala	Leu	Ser	Thr	Ser	Pro	Ser	Asp	Lys
					370									400
Gln	Ser	Lys	Thr	His	Thr	Ile	Asn	Ala	Tyr	His	Leu	Asp	Pro	Arg
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Pro	Lys	Ser	Glu	Leu	Glu	His	Glu	Phe	Tyr	Glu	Leu	Glu	Pro	Leu
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Ser	His	Ser	Cys	Thr	Ala	Pro	Glu	Lys	Thr	Thr	Tyr	Glu	Glu	Thr
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Ile	Cys	Ser	Glu	Phe	Phe	Asn	Ser	Gln	Ala	Lys	Asn	Leu	Gly	Met
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Val	His	Ala	Ala	Tyr	Asn	Ser	Glu	Leu	Ser	Lys	Ser	Thr	Glu	Ser
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Thr	Gly	Ser	Ala	Leu	Gln	Pro	Pro	Leu	Glu	Gln	His	Thr	Val	Cys
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His	Phe	Phe	Ser	Leu	Asn	Gln	Arg	Cys	Ser	Cys	Pro	Asp	Ala	Tyr
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His	Leu	Asn	Tyr	Gly	Pro	His	Ser	Cys	Gln	Gln	Met	Gly	Asp	Cys
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Cys	His	Gln	Cys	Ser	Pro	Thr	Thr	Ser	Ser	Phe	Val	Gln	Ile	Gln
					460									540
Gly	Val	Ala	Pro	Leu	Lys	Ala	Thr	His	Gln	Ala	Val	Glu	Gly	Phe
					470									560
His	Pro	Ile	Thr	His	Ile	His	His	Cys	Pro	Cys	Leu	Gln	Gly	Arg
					485									575
Lys	Pro	Ala	Gly	Met	Gln	Asn	Ser	Leu	Pro	Arg	Asn	Phe	Phe	Leu
					490									590
Pro	Val	Gln	His	Ile	Gln	Ala	Gln	Glu	Lys	Ile	Gly	Lys	Thr	Asn
					500									605
His	Ser	Leu	Gln	Arg	Ser	Ile	Glu	Glu	His	Leu	Pro	Lys	Met	Ala
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Pro	Ser	Ser	Phe	Val	Cys	Arg	Ser	Thr	Gly	Ser	Leu	Leu	Lys	Thr
					520									640
Cys	Asp	Pro	Glu	Asn	Lys	Gln	Arg	Glu	Leu	Cys	Lys	Asn	Arg	Asp
					530									655
Ser	Asn	Leu	Glu	Ser	Ser	Gly	Gly	Thr	Glu	Asn	Lys	Ala	Gly	Gly

	660		665		670										
Val	Glu	Leu	Ser	Leu	Ser	Gln	Thr	Asp	Ala	Ser	Val	Asn	Ser	Glu	His
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Phe	Asn	Gln	Asn	Glu	Pro	Lys	Val	Leu	Phe	Asn	His	Leu	Met	Gly	Glu
	690					695					700				
Ala	Gly	Cys	Arg	Ser	Cys	Pro	Asn	Asn	Ser	Gln	Ser	Cys	Gly	Arg	Ile
705					710					715				720	
Val	Arg	Val	Lys	Cys	Asn	Ser	Val	Asp	Cys	Gln	Met	Pro	Asn	Met	Glu
			725					730					735		
Ala	Asn	Val	Pro	Ala	Val	Leu	Thr	His	Ser	Glu	Leu	Ser	Gly	Glu	Ser
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<210> 2115

<211> 461

<212> DNA

<213> Homo sapiens

<400> 2115

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180
attgaaccga acagccgcgt cggaggggga tatctgtgga gagctgtgac tgggagccgg
240
tgtgtgcctt tctgtgttca tttctcgagt cctctgccgg ctgctgccag gtgaaggcat
300
ctccatgccc agccggtggg cagctggggc ggggtggacct ccagcttctg cccgacgggg
360
ttcagatgac cgagatccta cgggattgcc aatgtgtggg gacggggggc tttcaggggc
420
gggaaaacat gtcccatcc gtgggaagtg gagccacgtg g
461

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<210> 2116

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2116

Met	Gly	Thr	Cys	Phe	Pro	Ala	Pro	Glu	Ser	Pro	Pro	Ser	Pro	His	Ile
1				5				10					15		
Gly	Asn	Pro	Val	Gly	Ser	Arg	Ser	Ser	Glu	Pro	Arg	Arg	Ala	Glu	Ala
		20					25					30			
Gly	Gly	Pro	Pro	Ala	Pro	Ala	Ala	His	Arg	Leu	Gly	Met	Glu	Met	Pro
		35				40					45				
Ser	Pro	Gly	Ser	Ser	Arg	Gln	Arg	Thr	Arg	Glu	Met	Thr	Thr	Glu	Arg
	50					55				60					
His	Thr	Pro	Ala	Pro	Ser	His	Ser	Ser	Pro	Gln	Ile	Ser	Pro	Ser	Asp
65				70					75					80	
Ala	Ala	Val	Arg	Phe	Asn	Val	Ser	Phe	Leu	Phe	Arg	Ala	Gly	Gly	Cys

85 90 95
 Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu
 100 105 110
 Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro
 115 120 125
 Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu
 130 135 140
 Thr Arg
 145

<210> 2117

<211> 360

<212> DNA

<213> Homo sapiens

<400> 2117

nnacgcgttg gggagacgac ggtgaccttc ccagcaagct catcgagga tgaacaatc
 60
 cgcgccagcg ttaagacctt ctgcgggct gtcaccgccg atctggagaa gtgtggaccg
 120
 atcaggtgac actcgcgcta gactgaatag atgcctgagt ctgaagacac tgtgtggctg
 180
 acccaagagg ccttcgataa gtcacccag gagctggagt acctcaaagg cgaaggccgc
 240
 accgtcattg ccaacaagat tgccgacgcc cgttcggaag gcgaccttc tgagaacggc
 300
 ggctaccatg ccgccgtga ggagcagggg caggccgagg cccgcacccg tcaactcgag
 360

<210> 2118

<211> 70

<212> PRT

<213> Homo sapiens

<400> 2118

Met Pro Glu Ser Glu Asp Thr Val Trp Leu Thr Gln Glu Ala Phe Asp
 1 5 10 15
 Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val
 20 25 30
 Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu
 35 40 45
 Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala
 50 55 60
 Arg Ile Arg Gln Leu Glu
 65 70

<210> 2119

<211> 465

<212> DNA

<213> Homo sapiens

<400> 2119

nacgcgtgaa gggcgcgtgt cggcctctca ctggcgcagc ctgcactgcc gctgccgcct
 60

cgccccgccc ttgccttggc gttgtctctg gcaactgtggc ggactgacca cggccccggg
 120
 atgggctgca agggagacgc gacggagatt tgctataaaa tgggagttct ggttgctactc
 180
 actgttctgt ggctgttctc ctcaagaaag gccgactcaa aagccattac aacctctctt
 240
 acaacaaaat gggtttccac tccattgttg ttagaagcca gtgagttttt agcagaagac
 300
 agtcaagaga aattttggaa tttttagaa gccagtcaaa atattggatc atcagatcat
 360
 gacggtagcg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca
 420
 cccctccagc agaatttgtt taaattttgt ctgtcccttc acgcg
 465

<210> 2120

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2120

Met	Gly	Cys	Lys	Gly	Asp	Ala	Ser	Gly	Val	Cys	Tyr	Lys	Met	Gly	Val
1				5					10					15	
Leu	Val	Val	Leu	Thr	Val	Leu	Trp	Leu	Phe	Ser	Ser	Val	Lys	Ala	Asp
			20					25					30		
Ser	Lys	Ala	Ile	Thr	Thr	Ser	Leu	Thr	Thr	Lys	Trp	Phe	Ser	Thr	Pro
		35					40					45			
Leu	Leu	Leu	Glu	Ala	Ser	Glu	Phe	Leu	Ala	Glu	Asp	Ser	Gln	Glu	Lys
	50					55					60				
Phe	Trp	Asn	Phe	Val	Glu	Ala	Ser	Gln	Asn	Ile	Gly	Ser	Ser	Asp	His
65				70					75					80	
Asp	Gly	Thr	Asp	Tyr	Ser	Tyr	Tyr	His	Ala	Ile	Leu	Glu	Ala	Ala	Phe
			85					90					95		
Gln	Phe	Leu	Ser	Pro	Leu	Gln	Gln	Asn	Leu	Phe	Lys	Phe	Cys	Leu	Ser
			100					105					110		
Leu	His	Ala													
			115												

<210> 2121

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2121

ccggacaagg tcaatggaat gaaaacctcc cggccgacag acaatagtat aaatgttaca
 60
 tgtggtcctc cttatgaaac taatggccct aaaacctttt acatttttgg agtcagaagt
 120
 ggagggttctt ttgttacaaa atacaacaag acaaactgtc agttttatgt agataatctc
 180
 tactattcaa ctgactatga gtttctggtc tcttttcaca atggagtgtc cgagggagat
 240
 tcagttataa gaaatgagtc aacaaatttt aatgctaaag ccctgattat attcctggtg
 300

tttctgatta ttgtgacatc aatagccttg cttggt
336

<210> 2122

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2122

Pro	Asp	Lys	Val	Asn	Gly	Met	Lys	Thr	Ser	Arg	Pro	Thr	Asp	Asn	Ser
1				5					10					15	
Ile	Asn	Val	Thr	Cys	Gly	Pro	Pro	Tyr	Glu	Thr	Asn	Gly	Pro	Lys	Thr
			20					25					30		
Phe	Tyr	Ile	Leu	Val	Val	Arg	Ser	Gly	Gly	Ser	Phe	Val	Thr	Lys	Tyr
		35				40					45				
Asn	Lys	Thr	Asn	Cys	Gln	Phe	Tyr	Val	Asp	Asn	Leu	Tyr	Tyr	Ser	Thr
	50				55					60					
Asp	Tyr	Glu	Phe	Leu	Val	Ser	Phe	His	Asn	Gly	Val	Tyr	Glu	Gly	Asp
65				70					75					80	
Ser	Val	Ile	Arg	Asn	Glu	Ser	Thr	Asn	Phe	Asn	Ala	Lys	Ala	Leu	Ile
			85					90					95		
Ile	Phe	Leu	Val	Phe	Leu	Ile	Ile	Val	Thr	Ser	Ile	Ala	Leu	Leu	Val
			100					105					110		

<210> 2123

<211> 426

<212> DNA

<213> Homo sapiens

<400> 2123

aactgggccg agttcggcaa cctgcacccg ttgcgcccg cagagcaaag cgctgggtat
60
cagcaactga ccgacgaact ggaagcgatg ctctgcgccg ccacagggtta tgacgcgatc
120
tccttcgagc cgaacgctgg ctcccagggc gtagtcgccg gtctgctggc gatccgcgct
180
taccaccaga gccgtggcga tgagcgtcgc gacatctgcc tgattccgtc ctctgcccac
240
ggcaccaacc cggcaaccgc caacatggcc ggcacgcgcg tggcgtgac cgcttgcgac
300
gcccgcggca acgtcgacat cgaagacctg cgcgccaagg ctatcgagca ccgcaaacac
360
ctcgcggcgc tgatgatcac ctaccgctcg acccagggcg tggtcgaaga aggcacccgc
420
gagatc
426

<210> 2124

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2124

Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln


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      1           5           10           15
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
      20           25           30
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35           40           45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50           55           60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65           70           75           80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85           90           95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100          105          110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
      115          120          125
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
      130          135          140

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<210> 2125

<211> 285

<212> DNA

<213> Homo sapiens

<400> 2125

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ngtatggcat ctgctgcttc aagttttgtg gtgacaccaa atgtcacttc taacacaacc
60
acagtcaagc ccaatatggt tatgttacct attcaaaaca caagagggtc aagattgggt
120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccc ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaag agaggagcca aggtgagaat tcttaggaag
240
gagtcatact ggttcaaagg agtgggatca gttgtgactg ttgat
285

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<210> 2126

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2126

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Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
      1           5           10           15
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
      20           25           30
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35           40           45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50           55           60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65           70           75           80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85           90           95

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<210> 2127
 <211> 454
 <212> DNA
 <213> Homo sapiens

<400> 2127
 atggcagcca agatgcttgc attgttcgct ctcctagctc tttgtgcaag cgccactagt
 60
 ggcagcgata ttccagggca cttgtcacca gtcatgccat tgggtaccat gaacccatgc
 120
 atgcagtact gcatgatgca acaggggctt gccagcttga tggcgtgtcc gtccttgatg
 180
 ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg
 240
 acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgcaccaat ggtcttgccg
 300
 agcatgatgt cgcaaagtat gatgccacaa tgtcactgcg acgccgtctc gcagattatg
 360
 ctgcaacagc agttaccatt catgttcaac ccaatggcca tgacgattcc acccatgttc
 420
 ttacagcaac cctttgttgg tgctgcattc taga
 454

<210> 2128
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 2128
 Met Ala Ala Lys Met Leu Ala Leu Phe Ala Leu Leu Ala Leu Cys Ala
 1 5 10 15
 Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met
 20 25 30
 Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln
 35 40 45
 Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu
 50 55 60
 Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met
 65 70 75 80
 Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro
 85 90 95
 Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His
 100 105 110
 Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met
 115 120 125
 Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro
 130 135 140
 Phe Val Gly Ala Ala Phe
 145 150

<210> 2129
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 2129

acgcgtgact tgggtgaacaa acccatatcc atcacccctc tcggtgttga tacggaaata
 60
 ctcacgccct ttgacaagcg gcgtgatgcg aacggcggtg acgggggtgt ggcgcatcggg
 120
 actatcaagg ctctccactc caaatatggg ateggtgaac tcatccgtgc cttcagtcgg
 180
 gtccatgatg aacggcctaa taccgtcctt cgtatctggg gcggcggccc agacgagaat
 240
 cccctcaagg tcttggctcg ccgtcttgtc cgggacggtt cggtaggagtt tcgcggtgcc
 300
 attgatcatt ctgaggtcag aaatgccttg ggtagtttgg acatctttgc cgcc
 354

<210> 2130

<211> 118

<212> PRT

<213> Homo sapiens

<400> 2130

Thr	Arg	Asp	Leu	Val	Asn	Lys	Pro	Ile	Ser	Ile	Thr	Pro	Phe	Gly	Val
1				5					10					15	
Asp	Thr	Glu	Ile	Leu	Thr	Pro	Phe	Asp	Lys	Arg	Arg	Asp	Ala	Asn	Gly
		20					25						30		
Gly	Asp	Gly	Val	Val	Arg	Ile	Gly	Thr	Ile	Lys	Ala	Leu	His	Ser	Lys
	35					40						45			
Tyr	Gly	Ile	Gly	Glu	Leu	Ile	Arg	Ala	Phe	Ser	Arg	Val	His	Asp	Glu
	50				55					60					
Arg	Pro	Asn	Thr	Val	Leu	Arg	Ile	Trp	Gly	Gly	Gly	Pro	Asp	Glu	Asn
65				70					75					80	
Pro	Leu	Lys	Val	Leu	Ala	Arg	Arg	Leu	Val	Pro	Asp	Gly	Ser	Val	Glu
			85					90						95	
Phe	Arg	Gly	Ala	Ile	Asp	His	Ser	Glu	Val	Arg	Asn	Ala	Leu	Gly	Ser
		100					105						110		
Leu	Asp	Ile	Phe	Ala	Ala										
		115													

<210> 2131

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2131

gcacgcggc cattggttat gtgtgcctat tccattgggt atgtggaagg ttgggatcag
 60
 ccagacagtc attatgatgg tttgttacag ctgggcgagt ggggctttcg aatcaatgac
 120
 ctgatgaaga cggtagaggg cgcggcaggg tgcattgagt attatgaaat gctcaacgaa
 180
 caacgccccg acttgtctta tgacatagac ggtattgttt ataaagttga tcagattgac
 240
 ctgcaagaag agcttggttt tattgtctgt gcgccacgct gggcaattgc tcgaaaattt
 300

cctgctcaag aagaagttac gcgt
324

<210> 2132
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2132
Ala Ser Arg Pro Leu Val Met Cys Ala Tyr Ser Ile Gly Tyr Val Glu
1 5 10 15
Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly
20 25 30
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala
35 40 45
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp
50 55 60
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp
65 70 75 80
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile
85 90 95
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg
100 105

<210> 2133
<211> 292
<212> DNA
<213> Homo sapiens

<400> 2133
ggtacctgca atatggtatt gcatgacatg aataaatttt tccttactct gaactcacta
60
gtggctgtct ttagaggacc cggcgaactt ttctgtcttt ttcccacttg ctccatcaca
120
tacatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac
180
accagattac atcgctgtgg atccaacct gcattttcct gccctcctt tactgcgagt
240
gtcacctcta cccggaaagg tcttcaacct ccaagtttcc cagtaattta tt
292

<210> 2134
<211> 93
<212> PRT
<213> Homo sapiens

<400> 2134
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu
1 5 10 15
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr
20 25 30
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His
35 40 45
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser

50 55 60
 Asn Pro Ala Phe Ser Cys Pro Ser Phe Thr Ala Ser Val Thr Ser Thr
 65 70 75 80
 Arg Lys Gly Leu Gln Pro Pro Ser Phe Pro Val Ile Tyr
 85 90

<210> 2135
 <211> 439
 <212> DNA
 <213> Homo sapiens

<400> 2135
 acgcgttcca ttggtgtgtc gaatttcaag accgagcatc tggacgccat cgagggggcc
 60
 actccgagcg tcgaccaaat cgagatgcat ccttcgttca accaggcgac cttccgcgca
 120
 gagctggccg agcgcggcat taaccggag gcctggagcc cgctgggcca gtcgaaggac
 180
 ctcgacaatc ccgtcctcac cgatatttcc aaggcgactg gaaagacgcc tgcccaggtg
 240
 gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca
 300
 cgaattgccg agaacttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca
 360
 attgatggcc tggatcacgg caacaggctc ggtggtgacc cttctaccgc cgacttctga
 420
 ttctgcaaca ataaccggt
 439

<210> 2136
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2136
 Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala
 1 5 10 15
 Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser
 20 25 30
 Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn
 35 40 45
 Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro
 50 55 60
 Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val
 65 70 75 80
 Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser
 85 90 95
 Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu
 100 105 110
 Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn
 115 120 125
 Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe
 130 135

<210> 2137

<211> 330

<212> DNA

<213> Homo sapiens

<400> 2137

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nncctttgcc ttggetgata ccctcaccac ctgggaacat ccccagaca ccctcttaac
60
tccgggacag agatggctgg cggagcctgg ggccgcctgg cctgttactt ggagttcctg
120
aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc
180
tcttcgggtg agacacccgc tcagccagag aagacgagtg gcatggaggt ggctcgtac
240
ctgggtggctc agtatgggga gcagcgggcc tgggacctag cctccatac ctgggagcag
300
atggggctga ggtcactgtg cgccaagcc
330

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<210> 2138

<211> 86

<212> PRT

<213> Homo sapiens

<400> 2138

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Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
 1           5           10           15
Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala
      20           25           30
His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
      35           40           45
Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
      50           55           60
Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
      65           70           75           80
Ser Leu Cys Ala Gln Ala
                85

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<210> 2139

<211> 433

<212> DNA

<213> Homo sapiens

<400> 2139

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gagcagttga gcgcccagaa caccgggata aacagcaacc tgctggacat ggccggccag
60
gtgaacaagc tggcgagtac catcgccag tacaacgata agatttccaa agtcaccacc
120
gccgcccgtg ccccgaaaga cctgctggac cagcgcagcg aggcggtgcg ccagttgtcc
180
gagctggtcg ggaccaggt ggtccagcgc gggtcgagtt atgacgtcta tatcggcagc
240
ggtcagcgcc tggatgatgg caacagcacc aacacctgt ccgcagtgcc gagcaaggac
300

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gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga tatcacctcc
 360
 acggtgaccg gtggcgagat cgggtggtctg ctgcgctatc gcagcgatgt gctcgacccg
 420
 tcgatcaacg cgt
 433

<210> 2140

<211> 144

<212> PRT

<213> Homo sapiens

<400> 2140

Glu	Gln	Leu	Ser	Ala	Gln	Asn	Thr	Gly	Ile	Asn	Ser	Asn	Leu	Ser	Asp
1			5					10					15		
Met	Ala	Gly	Gln	Val	Asn	Lys	Leu	Ala	Ser	Thr	Ile	Ala	Gln	Tyr	Asn
		20					25					30			
Asp	Gln	Ile	Ser	Lys	Val	Thr	Thr	Ala	Ala	Gly	Ala	Pro	Asn	Asp	Leu
	35					40				45					
Leu	Asp	Gln	Arg	Ser	Glu	Ala	Val	Arg	Gln	Leu	Ser	Glu	Leu	Val	Gly
	50				55					60					
Thr	Gln	Val	Val	Gln	Arg	Gly	Ser	Ser	Tyr	Asp	Val	Tyr	Ile	Gly	Ser
65				70					75				80		
Gly	Gln	Arg	Leu	Val	Met	Gly	Asn	Ser	Thr	Asn	Thr	Leu	Ser	Ala	Val
			85						90					95	
Pro	Ser	Lys	Asp	Asp	Pro	Ser	Gln	Ser	Ala	Leu	Gln	Leu	Asp	Arg	Gly
		100					105					110			
Thr	Ser	Thr	Val	Asp	Ile	Thr	Ser	Thr	Val	Thr	Gly	Gly	Glu	Ile	Gly
		115				120					125				
Gly	Leu	Leu	Arg	Tyr	Arg	Ser	Asp	Val	Leu	Asp	Pro	Ser	Ile	Asn	Ala
	130					135					140				

<210> 2141

<211> 426

<212> DNA

<213> Homo sapiens

<400> 2141

nnatatccat gcagcgatcc tcataaat ttcgctgttat taggctttgg tgcgacggct
 60
 gtttatcctt atctttcttt ccgcttgatc aatgatatgg tggataaagg cgaagtgtta
 120
 ggtgacccaa ttgcttgatc tgtaaatat cgtaaaggta ttaacaaagg cttgatgaaa
 180
 atcctgtcta aaatgggtat ttcaacgatt gcctcttata gtggtgcgca attgtttgaa
 240
 gcggttggtc tggatactaa agtggctgac ctttgtttca aaggcggtgc aagtcgtatc
 300
 aaaggtgctc gttttgaaga tttccagcgt gatcaagcaa cgattgccaa taatgcttgg
 360
 aagttacgta aacctattca acaggcggt tatcttaa atcgatcatga ctctgagat
 420
 cagcgc
 426

<210> 2142
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 2142
 Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe
 1 5 10 15
 Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp
 20 25 30
 Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val
 35 40 45
 Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys
 50 55 60
 Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu
 65 70 75 80
 Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val
 85 90 95
 Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln
 100 105 110
 Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln
 115 120 125
 Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala
 130 135 140

<210> 2143
 <211> 1008
 <212> DNA
 <213> Homo sapiens

<400> 2143
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 120
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 180
 acggtcctca gcccctccaa ctccctcatt cgcgagccgg cgaattcgtc agtcaacggg
 240
 acgctcaaga gcacatatga gtacctcggg ctcatcgacg gtcacgatct acccgacgac
 300
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 360
 gacagtcggc aggccacgt caccacactc atggcggcgt catccctgaa aacctcaac
 420
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 480
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 660

gagaaatggg ggtgggagtc gatctcggac gggatattgc gccatctcga gacctacagt
 720
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 780
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 840
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 900
 gcgtacctgt tgaggatttc cgggaattgg gcgtggtgac atgacggttt cttggcaagg
 960
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<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met	Phe	Thr	Gly	Asp	Ala	Val	Val	Ile	Val	Glu	Val	Ser	Gln	Leu	Cys
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His	Ile	Val	Arg	Ser	Met	Ser	Phe	Gln	Arg	Phe	Leu	Ala	Gly	Val	Ala
		20						25					30		
Ala	Ile	Leu	Leu	Leu	Leu	Pro	Thr	Ala	Cys	Ala	Asp	Asp	Ala	Gln	Ala
		35					40					45			
Pro	Val	Val	Asp	Asn	Leu	Gly	Thr	Val	Leu	Ser	Pro	Ser	Asn	Ser	Leu
	50				55					60					
Ile	Arg	Glu	Pro	Ala	Asn	Ser	Ser	Val	Asn	Gly	Thr	Leu	Lys	Ser	Thr
65				70						75				80	
Tyr	Glu	Tyr	Leu	Arg	Leu	Ile	Asp	Gly	His	Asp	Leu	Pro	Asp	Asp	Asp
			85					90					95		
Gly	Tyr	Ala	His	Asp	His	Leu	Val	Ala	Ala	Leu	Arg	Pro	Tyr	Leu	Val
		100						105					110		
Asn	Gly	Gly	Asp	Ser	Arg	Gln	Ala	His	Val	Thr	Gln	Leu	Met	Ala	Ala
		115					120					125			
Ser	Ser	Leu	Lys	Thr	Leu	Asn	Ala	Leu	Ser	Asp	Lys	Glu	Arg	Ser	Glu
	130				135					140					
Val	Asp	Lys	Arg	Thr	Arg	Leu	Pro	Lys	Gly	Cys	Ile	Thr	Arg	Lys	Thr
145				150						155				160	
Val	Met	Thr	Asp	Leu	Pro	Ile	Ala	Thr	Met	Arg	Arg	Glu	Ile	Gly	Leu
			165					170					175		
Ser	Asn	Asp	Gly	Leu	Cys	Leu	Thr	Pro	Trp	Lys	Val	Lys	Thr	Thr	Ser
		180						185					190		
Ser	Glu	Glu	Ala	Arg	Trp	Ala	Met	Gln	Ala	Leu	Ala	Ser	Ala	Asp	Leu
	195				200							205			
Phe	Ser	Asn	Ala	Lys	Asp	Ala	Glu	Lys	Trp	Gly	Trp	Glu	Ser	Ile	Ser
	210				215					220					
Asp	Gly	Tyr	Leu	Arg	His	Leu	Glu	Thr	Tyr	Ser	Gly	Pro	Ser	Thr	Thr
225				230						235				240	
Ile	Ala	Met	Ala	Leu	Ser	Ala	Ala	Asn	Thr	Val	Ser	Thr	Leu	Ser	Arg
			245					250					255		
Ser	Gln	Leu	Gln	Arg	Ile	Gly	Asp	Ser	Leu	Ala	Asp	Ala	Pro	Tyr	Pro
		260						265					270		
Arg	Lys	Asp	Leu	Gly	Pro	Ala	Leu	Ile	Arg	Asn	Gly	Lys	Pro	Val	Lys

275 280 285
 Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn
 290 295 300
 Trp Ala Trp
 305

<210> 2145
 <211> 389
 <212> DNA
 <213> Homo sapiens

<400> 2145
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 120
 ttatttagct cggcccagcc ttctgctgaa caactaaaat tgattaaaga gtttggttgt
 180
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 240
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 360
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 389

<210> 2146
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2146
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 Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu
 20 25 30
 Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu
 35 40 45
 Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp
 50 55 60
 Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser
 65 70 75 80
 Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln
 85 90 95
 Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg
 100 105

<210> 2147
 <211> 235
 <212> DNA
 <213> Homo sapiens

<400> 2147

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 60
 acttgccctg tcacctggaa tgacttccac tgtacctgcc ctgccaattt cacggggcct
 120
 acatgtgccc agcagetgtg gtgtcccgcc cagccctgtc tcccacctgc cacgtgtgtg
 180
 gcggaggcca cgttccgcga gggcccccc gccgcgttca gcgggcacaa cgcgt
 235

<210> 2148

<211> 78

<212> PRT

<213> Homo sapiens

<400> 2148

Leu	Pro	Ala	Gly	Cys	Val	Ser	Glu	Asp	Met	Cys	Ser	Pro	Asp	Pro	Cys
1				5					10					15	
Phe	Asn	Gly	Gly	Thr	Cys	Leu	Val	Thr	Trp	Asn	Asp	Phe	His	Cys	Thr
		20						25					30		
Cys	Pro	Ala	Asn	Phe	Thr	Gly	Pro	Thr	Cys	Ala	Gln	Gln	Leu	Trp	Cys
		35					40					45			
Pro	Gly	Gln	Pro	Cys	Leu	Pro	Pro	Ala	Thr	Cys	Val	Ala	Glu	Ala	Thr
	50					55					60				
Phe	Arg	Glu	Gly	Pro	Pro	Ala	Ala	Phe	Ser	Gly	His	Asn	Ala		
65					70					75					

<210> 2149

<211> 1474

<212> DNA

<213> Homo sapiens

<400> 2149

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 120
 caacacgtgg gagtaagact tctctgtctc tttgccagtg gtctgaggtg atgaaccacc
 180
 ctggcttggt gtgctgtgtc cagcaaaacta caggggtgcc gctggtagtt atggtgaaac
 240
 cagacacttt tcttatecac gagattaaga ctcttcctgc taaagcgaag atccaagaca
 300
 tggttgctat taggcacacg gcctgcaatg agcagcagcg gacaacaatg attctgtctg
 360
 gtgaggatgg cagcctgcgc atttacatgg ccaacgtgga gaacacctcc tactggctgc
 420
 agccatccct gcagcccagc agtgtcatca gcacatgaa gcctgttcga aagcgcaaaa
 480
 cagctacaat cacaaccng cacgtctagc caggtgactt tccccattga cttttttgaa
 540
 cacaaccagc agctgacaga tgtggagttt ggtggtaacg acctctaca ggtctataat
 600
 gcacaacaga taaaacaccg gctgaattcc actggcatgt atgtggccaa caccaagccc
 660

ggaggcttca ccattgagat tagtaacaac aatagcacta tggatgatgac aggcattgcg
 720
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 780
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 840
 gccctgcagg ctgataagaa gctgaacctc ttcattgggg cctcgggtgga tccagcaggt
 900
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 960
 gatgagcccc cagaagaatt cccttctgcc tctgtcagca acatctgccc ttcaaactg
 1020
 aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtggaaact
 1080
 gtccctggaga ggctggttgt gagttcttta gaagccctgg aaagctgctt tgccgttggc
 1140
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 1200
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 1320
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 1380
 aaggtagagg gaggatagca ttcagattag acctacattt tacagagttt ctctgagaa
 1440
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 1474

<210> 2150

<211> 312

<212> PRT

<213> Homo sapiens

<400> 2150

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Ser	Gln	Val	Thr	Phe	Pro	Ile	Asp	Phe	Phe	Glu	His	Asn	Gln	Gln	Leu
		20						25					30		
Thr	Asp	Val	Glu	Phe	Gly	Gly	Asn	Asp	Leu	Leu	Gln	Val	Tyr	Asn	Ala
		35					40					45			
Gln	Gln	Ile	Lys	His	Arg	Leu	Asn	Ser	Thr	Gly	Met	Tyr	Val	Ala	Asn
		50				55				60					
Thr	Lys	Pro	Gly	Gly	Phe	Thr	Ile	Glu	Ile	Ser	Asn	Asn	Asn	Ser	Thr
65					70				75					80	
Met	Val	Met	Thr	Gly	Met	Arg	Ile	Gln	Ile	Gly	Thr	Gln	Ala	Ile	Glu
			85					90					95		
Arg	Ala	Pro	Ser	Tyr	Ile	Glu	Ile	Phe	Gly	Arg	Thr	Met	Gln	Leu	Asn
		100						105					110		
Leu	Ser	Arg	Ser	Arg	Trp	Phe	Asp	Phe	Pro	Phe	Thr	Arg	Glu	Glu	Ala
		115					120					125			
Leu	Gln	Ala	Asp	Lys	Lys	Leu	Asn	Leu	Phe	Ile	Gly	Ala	Ser	Val	Asp
		130				135					140				
Pro	Ala	Gly	Val	Thr	Met	Ile	Asp	Ala	Val	Lys	Ile	Tyr	Gly	Lys	Thr

145		150		155		160									
Lys	Glu	Gln	Phe	Gly	Trp	Pro	Asp	Glu	Pro	Pro	Glu	Glu	Phe	Pro	Ser
				165				170						175	
Ala	Ser	Val	Ser	Asn	Ile	Cys	Pro	Ser	Asn	Leu	Asn	Gln	Ser	Asn	Gly
			180					185					190		
Thr	Gly	Asp	Ser	Asp	Ser	Ala	Ala	Pro	Thr	Thr	Thr	Ser	Gly	Thr	Val
		195					200					205			
Leu	Glu	Arg	Leu	Val	Val	Ser	Ser	Leu	Glu	Ala	Leu	Glu	Ser	Cys	Phe
	210					215					220				
Ala	Val	Gly	Pro	Ile	Ile	Glu	Lys	Glu	Arg	Asn	Lys	Asn	Ala	Ala	Gln
225				230				235						240	
Glu	Leu	Ala	Thr	Leu	Leu	Ser	Leu	Pro	Ala	Pro	Ala	Ser	Val	Gln	
			245					250					255		
Gln	Gln	Ser	Lys	Ser	Leu	Leu	Ala	Ser	Leu	His	Thr	Ser	Arg	Ser	Ala
		260					265						270		
Tyr	His	Ser	His	Lys	Val	Thr	Val	Leu	Ser	Gly	Lys	Gly	Asn	Cys	Ser
	275					280					285				
Ala	Asp	Arg	Glu	Ser	Asn	Lys	Leu	Ala	Leu	His	Cys	Lys	Ala	Thr	Ala
	290				295					300					
Gln	Gln	Ser	Lys	Val	Glu	Gly	Gly								
305					310										

<210> 2151

<211> 511

<212> DNA

<213> Homo sapiens

<400> 2151

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120
gtgcatcagc gctcctttca gttgaccggg atcgccgac cttgctgggc gctggctcgt
180
gagctggcgg cggaggtgcg ggtgctgtgt ttcgatgagc tgttcgtcaa tgacatcggt
240
gacgcgatca ttctcgggcg cctgtttcag gtgatgttcg acgcaggcgt ggtgggtggtc
300
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360
ctgccggcga tcaccgcgat caaacagcac atgcaagtgg tcgcggtgaa tggcgcggaa
420
gatcatcgct tgcattcccg cgccatcgag cagcggtact gggctcgtct gccggagcag
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511

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<210> 2152

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2152

Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

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Met	Asp	Gln	Phe	His	Gln	Ser
				20		25
His	Phe	His	His	Phe	Met	Gly
		35				40
Thr	Gly	Ile	Ala	Asp	Pro	Leu
		50			55	
Glu	Val	Arg	Val	Leu	Cys	Phe
65				70		75
Asp	Ala	Ile	Ile	Leu	Gly	Arg
			85			90
Val	Val	Val	Val	Cys	Thr	Ser
		100				105
Asp	Gly	Phe	Asn	Arg	Asp	Arg
		115				120
Gln	His	Met	Gln	Val	Val	Ala
		130				135
His	Pro	Gly	Ala	Ile	Glu	Gln
145				150		155
Gly	Ser	Ala	Leu	Ser	Gln	Val
			165			170

<210> 2153

<211> 528

<212> DNA

<213> Homo sapiens

<400> 2153

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 120
 tggagcatat ggccaacttt tcgattcgcg atcaataagc cacaccgctc ccacctttga
 180
 tggcattcca agtctgaaat tgatccatct ctaataacaa aaatcccccg gagccccgtt
 240
 atgtcggtcg atccgcaaca cctgcttcgc gagctgtttg ccacagccat cgatgccgcc
 300
 cacccccggc atgtccttga accttatctg cccgctgacc gcacaggccg tgtgattgtg
 360
 attggggccc gcaaaaccgc acccgccatg gccctcgtcg tcgagaacgg ctggcaaggc
 420
 gaagtcaccg gcctgggtgt caccgctac ggccacggcg cgccgtgcaa aaaaatcgaa
 480
 gtgggtcgagg ccgtccacc ggtgccggat gccgccggcc tggcgggtg
 528

<210> 2154

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2154

Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala

1	5	10	15
Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala			
20	25	30	
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro			
35	40	45	
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly			
50	55	60	
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu			
65	70	75	80
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val			
85	90	95	

<210> 2155

<211> 297

<212> DNA

<213> Homo sapiens

<400> 2155

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ttcggccccg actgcgaggt gctcaaccgtc accgattcag agggcaaccc cctcagttcg
120
gtgctcagtt tctacttcgg tgatgaagtg ctgccctact atgcggggcga cgccgtcgcg
180
gcgcgcgaac tggcgcccaa tgacttcaaa tactggggagc tgatgcgacg cgccgtgtcg
240
cgcgccctca aggtgtttga ctacggccgc agcaagcagg gcacggggctc ctacgcn
297

<210> 2156

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2156

Met Pro Arg Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp			
1	5	10	15
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser			
20	25	30	
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly			
35	40	45	
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp			
50	55	60	
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr			
65	70	75	80
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala			
85	90		

<210> 2157

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2157

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 120
 ttgctggcat cctctctcat cccgggtaat gagaatgccg tctatcgagt gattaatggc
 180
 ctgacgaagc ttggcgccgc cgtggtacat aagggaacg ctttgggtcca cgtttccggc
 240
 catgccgcag ccggagagct gctgtacgcg tataacatcg tgcggccacg cgctgtgatg
 300
 ccgattcatg gtgagggtgcg tcatcttgtc gctaagccg atctggccaa agcaaccggt
 360
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 420
 gtaccgcgag ttgttggaac ggtccatgcc tcgtacatcc ttgttgacgg atctgggggtg
 480
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 540
 tcagtcgtca ccgtgggtcga caccgcctcg gcgtcagtgg tgtctcgccc ggcgatccag
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 660
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 711

<210> 2158

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2158

Xaa	Arg	Asp	Asn	Glu	Val	Val	Ile	Ile	Ser	Thr	Gly	Ser	Gln	Gly	Glu
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Pro	Leu	Ser	Ala	Leu	Ala	Arg	Ile	Ala	Asn	Arg	Glu	His	Arg	Asp	Ile
			20					25					30		
Glu	Val	Gly	Glu	Gly	Asp	Thr	Val	Leu	Leu	Ala	Ser	Ser	Leu	Ile	Pro
		35				40					45				
Gly	Asn	Glu	Asn	Ala	Val	Tyr	Arg	Val	Ile	Asn	Gly	Leu	Thr	Lys	Leu
	50					55				60					
Gly	Ala	Ala	Val	Val	His	Lys	Gly	Asn	Ala	Leu	Val	His	Val	Ser	Gly
	65				70				75					80	
His	Ala	Ala	Ala	Gly	Glu	Leu	Leu	Tyr	Ala	Tyr	Asn	Ile	Val	Arg	Pro
			85					90					95		
Arg	Ala	Val	Met	Pro	Ile	His	Gly	Glu	Val	Arg	His	Leu	Val	Ala	Asn
			100					105					110		
Ala	Asp	Leu	Ala	Lys	Ala	Thr	Gly	Val	Asp	Glu	Asn	Asn	Val	Val	Leu
		115				120					125				
Val	Glu	Asp	Gly	Gly	Val	Ile	Asp	Leu	Val	Asp	Gly	Val	Pro	Arg	Val
	130					135					140				
Val	Gly	Lys	Val	Asp	Ala	Ser	Tyr	Ile	Leu	Val	Asp	Gly	Ser	Gly	Val
	145			150					155					160	
Gly	Glu	Leu	Thr	Glu	Asp	Thr	Leu	Thr	Asp	Arg	Arg	Ile	Leu	Gly	Glu
			165					170					175		
Glu	Gly	Phe	Leu	Ser	Val	Val	Thr	Val	Val	Asp	Thr	Arg	Ser	Ala	Ser

180	185	190
Val Val Ser Arg Pro Ala Ile Gln Ala Arg Gly Phe Ala Glu Gly Asp		
195	200	205
Ser Val Phe Ala Glu Ile Thr Asp Gln Ile Val Thr Glu Leu Glu Lys		
210	215	220
Ala Met Ala Gly Gly Met Asp Asp Thr His Arg Leu Gln		
225	230	235

<210> 2159

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2159

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120
cctgttttga aaagttgtct ctgcagatgg tgggtgagag ttcgctgcca gggccactgt
180
cttccctgcc ctgcggacac ttcttcccca ccttcctaaa gctgtgggag acctggagcc
240
gtggagcatc aatggctctt tgactcagga atcttaaaaa atcacaccct ggggctacca
300
tgggggcctt ctggttctcc tt
322

<210> 2160

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2160

Met Val Ala Pro Gly Cys Asp Phe Leu Arg Phe Leu Ser Gln Arg Ala		
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Ile Asp Ala Pro Arg Leu Gln Val Ser His Ser Phe Arg Lys Val Gly		
20	25	30
Lys Lys Cys Pro Gln Gly Arg Glu Asp Ser Gly Pro Gly Ser Glu Leu		
35	40	45
Ser Pro Thr Ile Cys Arg Asp Asn Phe Ser Lys Gln Val Glu Gly Asn		
50	55	60
Arg Leu Leu Leu His Lys Ala Leu Pro Gly Arg Pro Trp Ser Cys Cys		
65	70	75
Pro Ala Ser Trp Cys Pro Phe Thr Arg Cys Arg Leu Ser Arg Gly Trp		
85	90	95
Ser Val Leu Ala		
100		

<210> 2161

<211> 1070

<212> DNA

<213> Homo sapiens

<400> 2161

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 gtggggatat gaggggagga aacctcaaaa agaatatgta tccatcacta tgaaagggtta
 120
 ggctatacag gggaagcctc caaagggaat tctggaaaaa tgttctgaga gggacattaa
 180
 ggaagtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg
 240
 aggagactta tatgcaaaaa tcgcaaaaga ggagagaaca aaagatggag gttggatgct
 300
 aaatagggaa agagaacgcg tgaatgaggt agggggcaga acatgcagtg cagaaaaaca
 360
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagttggga
 420
 atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaagggtggc aaagtaagag
 480
 ccagggcata aggttttgct gtccaggaag ctttgttga aaaatgttag aagtaatggg
 540
 tttggtcagt atggtgagag gtgagagagg ctaaagggga tgggcataaa gggcaggcca
 600
 gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga
 660
 atgtggcaca gggcagaggg cagtgggctg agcagcgagt gcccattggg aggggagtat
 720
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg
 780
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaag gaatggaaga
 840
 agaaagtga gggttcctgc tgatgtgagg ggatgactgg aggaaggca ggtattgact
 900
 ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc
 960
 tggctagctg agtaaaggac catcgataa aacagacaaa agttaagact agatggagtg
 1020
 gcaactaggc agatcagatg tatttttaaa aggggaaact gctaagatct
 1070

<210> 2162

<211> 145

<212> PRT

<213> Homo sapiens

<400> 2162

Met Val Leu Tyr Ser Ala Ser Gln Leu Ser Leu Pro Ser Tyr Ser Ile
 1 5 10 15
 Ile Thr Leu Ile Gln Glu Trp Phe Leu Tyr Pro Pro Val Asn Thr Cys
 20 25 30
 Leu Ser Ser Ser His Pro Leu Thr Ser Ala Gly Thr Leu His Phe Leu
 35 40 45
 Leu Pro Phe Leu Ser Ser Ser Phe Cys Pro Arg Glu Ser Cys Cys Tyr
 50 55 60
 Ile Phe Cys Val Pro Ser Phe Ser Cys His Leu Cys Val Ile Leu
 65 70 75 80
 Arg Asp Ser Met Gly Ser Ser Gly Tyr Ser Pro Pro His Gly His Ser

85 90 95
 Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile
 100 105 110
 Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr
 115 120 125
 Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro
 130 135 140
 Tyr
 145

<210> 2163

<211> 657

<212> DNA

<213> Homo sapiens

<400> 2163

tattttaaatc tttataaaaa aggtaggagg atcaggactt cgacccccctt aaaacgcggc
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 ggccctccctc caatccacct ccacttecta caccaccccc gctctcccc ccccccttt
 120
 tggttccggg ttggaagggt gggtgaaatg ggaaccgaat accaatttca cccgggaacc
 180
 agtaatgcc atgataaccg ccaagttggg accgaagttg ggatccataa gtacggggcg
 240
 ccagtggggg ggaattgggt taagccccct ccagccttt ctccgaccgc gtgctccgtc
 300
 agacatgcc agaggtcttc tctccaggag agccacctgt gaaacccacc cggcatgctc
 360
 ctcccaccac tgtgcacaga cgagtgcctg ggctccagag agggagggag ctgaaggcct
 420
 cagacaggag tccgtcccggt ccagtcctcat catcccaaga aacatccggc ccgactccct
 480
 gcagctccat ggctcaacaa ggtgcggatg cctgctggac ctggctgctt tccatccaac
 540
 tttgatccct tcccgaagag gaagagtgt acctagggac aagtgtggtg cgcacaggca
 600
 tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg
 657

<210> 2164

<211> 152

<212> PRT

<213> Homo sapiens

<400> 2164

Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser
 1 5 10 15
 Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe
 20 25 30
 Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg
 35 40 45
 Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala
 50 55 60
 Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

65		70		75		80									
Gln	Glu	Ser	Val	Pro	Ser	Ser	Pro	Ile	Ile	Pro	Arg	Asn	Ile	Arg	Pro
			85					90					95		
Asp	Ser	Leu	Gln	Leu	His	Gly	Ser	Thr	Arg	Cys	Gly	Cys	Leu	Leu	Asp
			100					105					110		
Leu	Ala	Ala	Phe	His	Pro	Thr	Leu	Ile	Pro	Ser	Pro	Arg	Gly	Arg	Val
		115					120					125			
Leu	Pro	Arg	Asp	Lys	Cys	Gly	Ala	His	Arg	His	Ala	Ala	Trp	Ser	Leu
	130					135					140				
Ala	Gln	Ala	Ala	Cys	Ala	Asp	Ser								
145					150										

<210> 2165

<211> 962

<212> DNA

<213> Homo sapiens

<400> 2165

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nctttctcat cgacagcgac gcacaaccgg cgacatcacc ggtgacggtt caaggtggca
60
gcccgagggc ccgccgtgaa cttatttgtt cgtcttatgg aagaaaagtc actcgaagt
120
accgtaaadc accccagcgc ctcaccccc gaatctgttc gccatctgct gtcgccccg
180
cgcttaaggc atcacccac tagactgacc gaagtctcgc cgagggaggc tagggaggct
240
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
300
tcgagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga
360
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac
420
tcctggttcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgctca
480
ggtattgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta cccccccacc
540
gacgtcttcg acgtggcgcc ccggtccatg acccgcaaga tctccttgca ccagacagtc
600
gagctcgtcc gcaccacgat tgacgtcgtt gaggcacaaa ttgagaccga aatgccacgc
660
ggtgatcgcc aagtgtcgcg cactgccatc gtctactact cccgcgaggt ggccttcgcc
720
gccgccgagg ttacgcgcg agccgccgaa cgtcgcggtg cctgggatga acgtctggaa
780
tcctcgtcgc ttgatgccgt cgtgcgagcc gacgccgatg aacagctcat ctcgcgagct
840
tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcgggcg ggccccgacg
900
accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacggtgcta
960
gc
962

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<210> 2166

<211> 239
 <212> PRT
 <213> Homo sapiens

<400> 2166

```

Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser
 1           5           10          15
Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr
          20          25          30
Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr
          35          40          45
Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp
          50          55          60
Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly
65          70          75          80
Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Asp Ala Glu Pro Tyr
          85          90          95
Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys
          100         105         110
Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val
          115         120         125
Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val
          130         135         140
Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala
          145         150         155         160
Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu
          165         170         175
Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp
          180         185         190
Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile
          195         200         205
Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu
          210         215         220
His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu
          225         230         235

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<210> 2167
 <211> 325
 <212> DNA
 <213> Homo sapiens

<400> 2167

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accggtgcag tttgtgagg gttggtgacg cccgatcggg aggttcacgc cgtcacggcg
60
catccacatt atcccgaactg gaagatctcg ccagggttacg gacagtggtc gcgtagcgaa
120
cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcggcg tcccacggcg
180
attcttcgag cggtgtctga ggtgacgttc gggttgcgtc tctgcgccgt ccgttgggcg
240
agcacccggg cgattgtggc tgtgtcgccg gccttgctct cgacgcggtc gcgcgggctg
300
tgcgtgatc tcccacagca taccc
325

```

<210> 2168
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2168
 Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His
 1 5 10 15
 Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly
 20 25 30
 Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr
 35 40 45
 Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala
 50 55 60
 Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg
 65 70 75 80
 Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg
 85 90 95
 Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr
 100 105

<210> 2169
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 2169
 gagcgacgcct acgtgctcat caccagggc aagatctcgg cgategccga cgtcctgccg
 60
 atcctggaga aggtcgtcaa ggccggcaag ccgctgctcg tcacgccga ggacatcgac
 120
 ggggaggccc tgtccaccct cgctgtcaat aagatccgcg gtaccttcag ctcggtggca
 180
 gtcaaggcgc ccggttcggt tgaccgccgc aaggcaatgc tgcaggacat cgccaccctc
 240
 accggtgggtc aggtcgtcgc tcccgaggtt gggctcaagc tcgaccaggt gggcctcgag
 300
 gttcagggc
 309

<210> 2170
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 2170
 Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala
 1 5 10 15
 Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu
 20 25 30
 Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val
 35 40 45
 Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro

50 55 60
 Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu
 65 70 75 80
 Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln
 85 90 95
 Val Gly Leu Glu Val Gln Gly
 100

<210> 2171

<211> 518

<212> DNA

<213> Homo sapiens

<400> 2171

cgcgtaatgt gtattaaggt ccttggtggc tcgcatcgcc gttatgcagc aatcgggtgat
 60
 atcatcaaag ttccagtga ggaagcaatt cctcgcgga aaattaaaaa aggtaatggt
 120
 cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt
 180
 cgttttgatc gcaacgcagc gggttatcttg aatgcaaaca accagccagt cggtagacgt
 240
 atctttggcc ctgtaaccg tgagcttcga aatgaaaatt tcatgaagat tgtttcactg
 300
 gcgccagaag tactgtaagg aaccgaaaat ggcagcaaaa ataaaacgtg acgatgaagt
 360
 aattgttatt gccggtaaag ataaaggtaa aactgggaaa gtttctcaag ttttaactaa
 420
 cggtaaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaac caaacctca
 480
 agcgggctg gaaggcgga tcattgaaca gaatgcat
 518

<210> 2172

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2172

Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala
 1 5 10 15
 Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg
 20 25 30
 Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Val Arg Thr
 35 40 45
 Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg
 50 55 60
 Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg
 65 70 75 80
 Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys
 85 90 95
 Ile Val Ser Leu Ala Pro Glu Val Leu
 100 105

<210> 2173
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2173
 nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag
 60
 cgggcgcgtg ccttttgctg cggggtttcg agcattcatt tggatgcatt attttcgcat
 120
 gcattttctg taccctctgc atgcgtttct cccatgcac acacattatc gcctttgcac
 180
 ccgcaggac gcatggaata cctcgtgaaa tggaaggat ggtcgcagaa gtacagcaca
 240
 tgggaaccgg aggaaaacat cctggatgct cgttgctcg cagcctttga ggaaaggaa
 300
 agagagatgg agctctatgg ccccaaaaag cgtggacca agcccaaac cttcctctc
 360
 aaagcgcagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgactc agccaggggc
 420
 atccgatcc cctaccctgg ccgctcgccc caggacctg cctccacttc ccggg
 475

<210> 2174
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2174
 Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala
 1 5 10 15
 Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile
 20 25 30
 His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Ser Cys
 35 40 45
 Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg
 50 55 60
 Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr
 65 70 75 80
 Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe
 85 90 95
 Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly
 100 105 110
 Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala
 115 120 125
 Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro
 130 135 140
 Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg
 145 150 155

<210> 2175
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 2175
 cgcgacaccc tctttggtgg ggccttctct tctccgaatt cgcgaaccct ccagactctg
 60
 gcccaggagg ttgtcgagcg tggagccgat atcggcattg cactgatgg tgacgcagac
 120
 cgctcggtta tcattgatga ccaggggcat ttcttgcac ccaaccagat cctcgtattg
 180
 ctgtacacct accttctgga ggacaaggga tggcaggtgc cctgcgtgcg taacctcgcg
 240
 acgacccacc tgcttgaccg tgtcgccgag gccacgggc agacctgtta cgaggtaccg
 300
 gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cggtggtgag
 360
 tcctccggtg gtttgaccgt ccaggggcat attgcaggca aggatgggtg ctatgctggc
 420
 acctgtctgg tggaaatgat cgccaagcgg ggtaagaagc tt
 462

<210> 2176
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 2176
 Arg Asp Thr Leu Phe Gly Gly Arg Leu Pro Ser Pro Asn Ser Arg Thr
 1 5 10 15
 Leu Gln Thr Leu Ala Gln Glu Val Val Glu Arg Gly Ala Asp Ile Gly
 20 25 30
 Ile Ala Thr Asp Gly Asp Ala Asp Arg Leu Gly Ile Ile Asp Asp Gln
 35 40 45
 Gly His Phe Leu His Pro Asn Gln Ile Leu Val Leu Leu Tyr Thr Tyr
 50 55 60
 Leu Leu Glu Asp Lys Gly Trp Gln Val Pro Cys Val Arg Asn Leu Ala
 65 70 75 80
 Thr Thr His Leu Leu Asp Arg Val Ala Glu Ala His Gly Gln Thr Cys
 85 90 95
 Tyr Glu Val Pro Val Gly Phe Lys Trp Val Ser Ser Lys Met Ala Glu
 100 105 110
 Thr Asn Ala Val Ile Gly Gly Glu Ser Ser Gly Gly Leu Thr Val Gln
 115 120 125
 Gly His Ile Ala Gly Lys Asp Gly Val Tyr Ala Gly Thr Leu Leu Val
 130 135 140
 Glu Met Ile Ala Lys Arg Gly Lys Lys Leu
 145 150

<210> 2177
 <211> 478
 <212> DNA
 <213> Homo sapiens

<400> 2177
 ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg
 60

accttggaact cgattgtcgg cgtgctggcc ggggcatacct ggtatcagcg ggagatccac
 120
 gacttttttg gtgtgaggtt tgteggccct ggggcagatg atcgtgccct ccttgteccac
 180
 gatgcaccga aaccgcccct ggcgaaggaa gctgtgttgg cgcagcgagc tgacaccgtg
 240
 tggccgggtg cggctgacca ggctggctcg aagtccgcga gtcgacgtct gccggtcggc
 300
 gttcctgacc ctgagacgtg gcggcgtatc aaagacggcg aggatattcc ggatgccgag
 360
 gtcacgcggg ccatgtctgg ccggcgcccg cgatcagctg cccgtcgaat ggcaagcacg
 420
 gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac
 478

<210> 2178

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2178.

Leu	Glu	Asn	His	Asp	Gly	Asp	Asp	Val	Thr	Ile	Ser	Thr	Arg	Val	Pro
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Arg	Asp	Gly	Gly	Thr	Leu	Asp	Ser	Ile	Val	Gly	Val	Leu	Ala	Gly	Ala
		20						25					30		
Ser	Trp	Tyr	Gln	Arg	Glu	Ile	His	Asp	Phe	Phe	Gly	Val	Arg	Phe	Val
		35					40					45			
Gly	Pro	Gly	Ala	Asp	Asp	Arg	Ala	Leu	Leu	Val	His	Asp	Ala	Pro	Lys
	50					55					60				
Pro	Pro	Leu	Arg	Lys	Glu	Ala	Val	Leu	Ala	Gln	Arg	Ala	Asp	Thr	Val
65					70					75				80	
Trp	Pro	Gly	Ala	Ala	Asp	Gln	Ala	Gly	Ser	Lys	Ser	Ala	Ser	Arg	Arg
			85					90						95	
Leu	Pro	Val	Gly	Val	Pro	Asp	Pro	Glu	Thr	Trp	Arg	Arg	Ile	Lys	Asp
			100					105					110		
Gly	Glu	Asp	Ile	Pro	Asp	Ala	Glu	Val	Ile	Ala	Ala	Met	Ser	Gly	Arg
		115					120					125			
Arg	Pro	Arg	Ser	Ala	Ala	Arg	Arg	Met	Ala	Ser	Thr	Ala	Ser	Gly	Arg
	130					135					140				
Gln	Ala														
145															

<210> 2179

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2179

gtgcacttcc gagtggacgt cgagcgtcgc attaacgggg ccggcgcggt gggcgcacac
 60
 aagacgtcga tgctgcagga tctggacngc gaccgcgcga tggagatcga cccgctcgtc
 120
 tccgctcgttc aggagatggg acgcctggcc aacgtgccga cgeccacgct cgatgtcgtg
 180

ctcccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag
 240
 gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggn
 296

<210> 2180
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 2180
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala
 1 5 10 15
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg
 20 25 30
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg
 35 40 45
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile
 50 55 60
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln
 65 70 75 80
 Glu Arg Leu Ala Lys Ala Ala
 85

<210> 2181
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2181
 ngcgcgcgcg gatggatcat agtctggctc gatgcatcac gtgcgcgcgc gcgcgcgcgtg
 60
 tcgattcccg acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacgcacctc
 120
 acgctggcat cgccggaagc ggggtgtcgc agcgaactga acgtgcgcga cgggtgcgatg
 180
 gtcgcgcgcg ggcagacgct cgccaagatt tcgggectct cgaagctctg gctgacgcgc
 240
 gagattcccg aagcgctcgc gctcgatgcg cgtccgggca tgaccgtcga cgcgacgttc
 300
 tcgggcgatc cgacgcagca ttccaccggg cgtatccgcg agatcctgcc gggcatcacc
 360
 accagtagcc gcacgttca ggcgcgc
 387

<210> 2182
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 2182
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg
 1 5 10 15
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

	20		25		30										
Thr	Gly	Lys	Ala	Gln	Thr	His	Leu	Thr	Leu	Ala	Ser	Pro	Glu	Ala	Gly
	35						40					45			
Val	Val	Ser	Glu	Leu	Asn	Val	Arg	Asp	Gly	Ala	Met	Val	Ala	Pro	Gly
	50					55					60				
Gln	Thr	Leu	Ala	Lys	Ile	Ser	Gly	Leu	Ser	Lys	Leu	Trp	Leu	Ile	Val
65					70					75				80	
Glu	Ile	Pro	Glu	Ala	Leu	Ala	Leu	Asp	Ala	Arg	Pro	Gly	Met	Thr	Val
			85						90				95		
Asp	Ala	Thr	Phe	Ser	Gly	Asp	Pro	Thr	Gln	His	Phe	Thr	Gly	Arg	Ile
		100						105				110			
Arg	Glu	Ile	Leu	Pro	Gly	Ile	Thr	Ser	Ser	Arg	Thr	Leu	Gln	Ala	
	115						120					125			
Arg															

<210> 2183

<211> 310

<212> DNA

<213> Homo sapiens

<400> 2183

aagcttgaaa aacaaatttg tgcacagtct gataacccaa aaatgactga tggattggct

60

ctgcattttc caagcagggg ggggtcgggc atggagaatg aaacattctg agaaaagact

120

taaagtgtga aacttttggg tcaagagggt attctaggag atacaagaaa tatctcctgg

180

gggcatccaa agggaataac actgtaatct tgagtgatgt atggttccat tgcccagga

240

atagggatga aaaccataaa ctcttttggg tgggtattaa cttatcantc aaagttacca

300

tanataatgg

310

<210> 2184

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2184

Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp

1

Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile

20

Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu

35

Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu

50

Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala

65

Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe

85

Val Phe Gln Ala

100

<210> 2185

<211> 723

<212> DNA

<213> Homo sapiens

<400> 2185

ngaatatcca tgcagcagct cgtcgacaat ttgacgggtg ccatccctga cgatcttgac
 60
 tctcttgtga ccttgcctgg agtcggctgt aagaccgcca atgttgtttt aggtaatgcc
 120
 ttccgcatcc ccggaatcac cccggacacc cagtcctgac gggatctctg acgtctgggc
 180
 tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgaccgg
 240
 tctgaatggg tgatgttgtg tcaccgcctc atctggcacg ggcggcgggc ctgtcactcg
 300
 cgcgctcctg cctgcggggg atgcccgggt gcgagtggt gccgctcctt cggggaaggc
 360
 ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgctgatg agggggatga
 420
 acgttttcgg cgcggtgatg gccgccttga tggttgctgg ctgcggggga gatgcgggca
 480
 tagctcatca gcgtgaaaat gccggaatac cggggtgctc gcatttgccg tcggggccga
 540
 ttgcgaaaag ttccggggcc gccacagagg gccggcccat gcccgatcac ggcttgcaat
 600
 gccttggtga ggggcccagc atctccatgt ctccggcgac atcgaggggc gtgaccgtcg
 660
 tgacgatctg ggcgtcgtgg tgcgacccat gtcgtagtga ggctccgctc attgcgaacg
 720
 cgt
 723

<210> 2186

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2186

Xaa	Ile	Ser	Met	Gln	Gln	Leu	Val	Asp	Asn	Phe	Asp	Gly	Ala	Ile	Pro
1				5					10					15	
Asp	Asp	Leu	Asp	Ser	Leu	Val	Thr	Leu	Pro	Gly	Val	Gly	Arg	Lys	Thr
		20						25					30		
Ala	Asn	Val	Val	Leu	Gly	Asn	Ala	Phe	Gly	Ile	Pro	Gly	Ile	Thr	Pro
		35				40						45			
Asp	Thr	His	Val	Met	Arg	Val	Ser	Arg	Arg	Leu	Gly	Trp	Thr	Asp	Ala
	50				55					60					
Thr	Thr	Pro	Ala	Lys	Val	Glu	Thr	Asp	Leu	Ala	Glu	Leu	Phe	Asp	Pro
65				70					75					80	
Ser	Glu	Trp	Val	Met	Leu	Cys	His	Arg	Leu	Ile	Trp	His	Gly	Arg	Arg
			85					90					95		
Arg	Cys	His	Ser	Arg	Arg	Pro	Ala	Cys	Gly	Val	Cys	Pro	Val	Ala	Glu

	100		105		110										
Trp	Cys	Pro	Ser	Phe	Gly	Glu	Gly	Pro	Thr	Asp	Pro	Glu	Glu	Ala	Ala
	115		120		125										
Thr	Leu	Val	Arg	Glu	Pro	Arg	Arg								
	130		135												

<210> 2187
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 2187
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 cccgccatat gctgcaaccg caacaccgct ttgcgcgcgc atggcatctc cactccggat
 120
 cgcacgatc caccagggct atcggcgcga aagaagttgc cggggcaaaa tcccggcgag
 180
 gaaagcccg tggagtggaa gacgctgctc aacgacacc gttcggagg ggtcgccagc
 240
 ctcgatggga cgcgcggacg gtcggagttc cagaaggacc acgaccgat catcttctcc
 300
 gaagccttcc gcaagctggg ccgcaagacc caggtgcacc cg
 342

<210> 2188
 <211> 51
 <212> PRT
 <213> Homo sapiens

	1		5		10		15
Met	Glu	Trp	Lys	Thr	Leu	Leu	Asn
Ser	Leu	Asp	Gly	Thr	Arg	Gly	Arg
Arg	Ile	Ile	Phe	Ser	Glu	Ala	Phe
Val	His	Pro					

<210> 2189
 <211> 1412
 <212> DNA
 <213> Homo sapiens

<400> 2189
 ntgcgttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg
 60
 cgttcttcca cgcgatgcta gatgcggggg tcaacctgcc gccatcgtgc tttgaggcct
 120
 ggttcctctc ggacgctcac gacgacgaag ctttcgaggt ttccgcgcc gccctgccga
 180
 gggctgcca ggcggtgcc caggtgatca gtgcctgaca cggggtgac ttgcaggtc
 240

atcgaggcaa tctgtgcctg gtctgacgcc aacggacgcg atctgcogtg gcgccgaccc
 300
 ggcacctccg cgtggggcgt gcttgtagc gaggtcatga gccaacagac cccgatgtcc
 360
 cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccaccctga tgatttgcg
 420
 gaggaggact ctggggaagc ggttgccgcg tggggcgcc tgggttacc gcgtcgggccc
 480
 ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgcccac
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 600
 tcttttgctg ttggcgccg cgccacagt cttgacacca atgtacgtc cctcatcgct
 660
 agagcagagt ctgggatcgc aaactgtcca acctcgggtga cgagggctga gcgggtagt
 720
 gccgacgcgt tggttccga cgaagacgtc cgagcgcca agtggcggt gccgtcgatg
 780
 gaattggggg cactggtagt cagggcgcg tctccgagt gtgaggtctg cccgatccg
 840
 gatggctgca ggtgggtgat cgacggtagg cgggacaatg cccggcccg tcgaggacg
 900
 ccatggaagg gcacggatcg ccagtgccgc ggcgtgatta tggacgtggt gcgcaacagc
 960
 cctcacgggg tgaaggcca gatggctctt tccgcctggc ccgagctcga tcaggcatca
 1020
 aggtgcctgg aatccttact cgatgacggt ttagtgcacc gacgaggtaa ccttattagc
 1080
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc
 1140
 cgctgggtta tcttagagg cggctctcaa attggatcag ccaaaccacg tcaccgatca
 1200
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgcc gacgccgaca
 1260
 cattgtcgac catctgcgtt ctttggggca ctgggagtc atcgagatc tttaccaact
 1320
 gttcgggtgc tctacatcga cgattcgccg cgatgtcgat gccctctcgg atgaatccaa
 1380
 gatctggaag atttccgggg gagacgtcat ga
 1412

<210> 2190

<211> 292

<212> PRT

<213> Homo sapiens

<400> 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10						15	
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
			20				25						30		
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
		35					40					45			
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

50 55 60
 Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala
 65 70 75 80
 Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser
 85 90 95
 Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser
 100 105 110
 Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser
 115 120 125
 Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr
 130 135 140
 Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys
 145 150 155 160
 Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val
 165 170 175
 Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu
 180 185 190
 Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys
 195 200 205
 Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn
 210 215 220
 Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys
 225 230 235 240
 Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys
 245 250 255
 Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg
 260 265 270
 Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn
 275 280 285
 Leu Ile Ser Leu
 290

<210> 2191

<211> 502

<212> DNA

<213> Homo sapiens

<400> 2191

nnacgcgtcg agaattctcta ctctgccccg aacaacgtcc ggcttcgtca ggctcacgat
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 gactcccttg acgacgacac catttcggg ggtagccac attggtgctg cctcatggac
 120
 tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc
 180
 agagtattgc tgaattctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc
 240
 cgcgaggagg ccctcgagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc
 300
 gccgccgaa aagtgcgtcg ccactttttc gataaccggg ttcgcctcaa ctacctggtc
 360
 aacctcaagt ccggcctgtg tcccgaagac tgctctatt gctcgcagcg tctgggacg
 420
 cgtgccgaga tcacgaaata ctctggggcc gatccgcaga aggtacacga cgccgtcgag
 480

gctgggattg ceggtggtgc ac
502

<210> 2192
<211> 104
<212> PRT
<213> Homo sapiens

<400> 2192
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile
1 5 10 15
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu
20 25 30
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp
35 40 45
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys
50 55 60
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu
65 70 75 80
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val
85 90 95
Glu Ala Gly Ile Ala Gly Gly Ala
100

<210> 2193
<211> 321
<212> DNA
<213> Homo sapiens

<400> 2193
ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc
60
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac
120
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca
180
agtcattgtac tgccaacagg gacacactgt tttctttgga aacctgctg tgtgcccaga
240
cagaggtccc actgccctgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc
300
tgtgtgtgtt taggttgggg a
321

<210> 2194
<211> 106
<212> PRT
<213> Homo sapiens

<400> 2194
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala
1 5 10 15
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu
20 25 30
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

	35					40					45				
Lys	Asn	Phe	Lys	Ser	Pro	Phe	Ile	Ser	Leu	His	Lys	Ser	Cys	Thr	Ala
50						55					60				
Asn	Arg	Asp	Thr	Leu	Phe	Ser	Leu	Glu	Thr	Leu	Leu	Cys	Ala	Gln	Thr
65					70					75				80	
Glu	Val	Pro	Leu	Pro	Trp	Asp	Ser	Ser	Leu	Ala	Xaa	Arg	Gly	Arg	Arg
				85					90					95	
Val	Cys	Val	Leu	Cys	Val	Phe	Arg	Leu	Gly						
			100					105							

<210> 2195

<211> 504

<212> DNA

<213> Homo sapiens

<400> 2195

nacgcgtctc cctacatcaa tgcccaccgc gattgcacct ttgttgcat gtcacctggc
 60
 gacgggtgtgg cacaccccaa ctttggaat atcgccacg acctggtgct gttgcacagc
 120
 ctgggtgtgc gtctgtact ggtccacggt tcgcgccgc agatcgacag ccgccttgag
 180
 gcacgaggcc tgggtccgta ttaccacaag ggcacgcgtg tcaccgatgc atcaacgctc
 240
 gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
 300
 gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
 360
 actgcgcggc cgatcggcgt gctcgacggt gtggattttc accataccgg cgaagtgcgc
 420
 cgggtggacc gcaaggcat caaccgctg ctgatgagc gtcgattgt gctgctgtgc
 480
 cccttgggtt actcgccac cggt
 504

<210> 2196

<211> 168

<212> PRT

<213> Homo sapiens

<400> 2196

Xaa	Ala	Ser	Pro	Tyr	Ile	Asn	Ala	His	Arg	Asp	Cys	Thr	Phe	Val	Val
1				5				10					15		
Met	Leu	Pro	Gly	Asp	Gly	Val	Ala	His	Pro	Asn	Phe	Gly	Asn	Ile	Val
			20					25				30			
His	Asp	Leu	Val	Leu	Leu	His	Ser	Leu	Gly	Val	Arg	Leu	Val	Leu	Val
		35				40					45				
His	Gly	Ser	Arg	Pro	Gln	Ile	Asp	Ser	Arg	Leu	Glu	Ala	Arg	Gly	Leu
50					55					60					
Val	Pro	Tyr	Tyr	His	Lys	Gly	Met	Arg	Val	Thr	Asp	Ala	Ser	Thr	Leu
65				70				75						80	
Glu	Cys	Val	Ile	Asp	Ala	Val	Gly	Gln	Leu	Arg	Ile	Ala	Ile	Glu	Ala
			85					90						95	
Arg	Leu	Ser	Met	Asp	Met	Ala	Ser	Ser	Pro	Met	Gln	Gly	Ser	Arg	Leu

	100		105		110										
Arg	Val	Ala	Ser	Gly	Asn	Leu	Val	Thr	Ala	Arg	Pro	Ile	Gly	Val	Leu
	115						120					125			
Asp	Gly	Val	Asp	Phe	His	His	Thr	Gly	Glu	Val	Arg	Arg	Val	Asp	Arg
	130						135					140			
Lys	Gly	Ile	Asn	Arg	Leu	Leu	Asp	Glu	Arg	Ser	Ile	Val	Leu	Leu	Ser
	145					150				155				160	
Pro	Leu	Gly	Tyr	Ser	Pro	Thr	Gly								
				165											

<210> 2197

<211> 351

<212> DNA

<213> Homo sapiens

<400> 2197

acaagtccgt cgacgattcg ctttccggag gcgggccag gaatggtaat gaaacccgag
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ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggg gctactcacg ataaactgtc cgggtgctgtt
180
ccgaaacgct acgatgggtcg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
240
cttggtgccta gcccggtgg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351

<210> 2198

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2198

Thr	Ser	Pro	Ser	Thr	Ile	Arg	Phe	Pro	Glu	Ala	Gly	Pro	Gly	Met	Val
1			5					10					15		
Met	Lys	Pro	Glu	Leu	Trp	Gly	Pro	Ala	Leu	Asp	Glu	Ile	Ala	Ala	Gly
		20					25					30			
Lys	Arg	Ala	Gly	Gly	Ala	Glu	Gln	Leu	Asp	Ser	Ala	Val	Gln	His	Ile
	35					40					45				
His	Gly	Ala	Thr	His	Asp	Lys	Leu	Ser	Gly	Ala	Val	Pro	Lys	Arg	Tyr
	50				55				60						
Asp	Gly	Arg	Asp	Val	Leu	Ala	Gly	Glu	Asp	Pro	Asn	Ala	Pro	Leu	Leu
65				70				75					80		
Leu	Val	Pro	Ser	Pro	Ala	Gly	Ala	Val	Phe	Ser	Gln	Asn	Lys	Ala	Gln
			85					90					95		
Ala	Trp	Ser	Asn	Glu	Asp	His	Ile	Val	Phe	Ala	Cys	Gly	Arg	Tyr	Glu
			100				105					110			
Gly	Ile	Asp	Gln	Arg											
			115												

<210> 2199

<211> 457

<212> DNA

<213> Homo sapiens

<400> 2199

agacgccggc cgccaagatc tgcatecccta ggccacgcta agaccctggg gaagagcgca
 60
 ggagccccggg agaagggctg gaaggagggg actggacgtg cggagaattc cccctaataa
 120
 ggcagaagcc cccgccccca ccctccgagc tccgttcggg cagagcgctt gcttgctgc
 180
 cgttgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag
 240
 atccctttct gcgacgccaa ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc
 300
 ggcggcccg agagggcagg cgcgcgagg cagcggcaga acatcgtctg gaggaatgtc
 360
 gtctgatga gcttgcctca cttggggggc gtgtactccc tgggtgctcat ccccaaagcc
 420
 aagccactca ctctgctctg gggttaagtcc cgcgggc
 457

<210> 2200

<211> 152

<212> PRT

<213> Homo sapiens

<400> 2200

Arg	Arg	Arg	Pro	Pro	Arg	Ser	Ala	Ser	Leu	Gly	His	Ala	Lys	Thr	Leu
1			5						10					15	
Gly	Lys	Ser	Ala	Gly	Ala	Arg	Glu	Lys	Gly	Trp	Lys	Glu	Gly	Thr	Gly
			20					25					30		
Arg	Ala	Glu	Asn	Ser	Pro	Leu	Lys	Gly	Arg	Ser	Pro	Arg	Pro	His	Pro
		35					40					45			
Pro	Ser	Ser	Val	Arg	Ala	Glu	Arg	Leu	Pro	Ala	Cys	Arg	Cys	Trp	Gly
		50				55					60				
Arg	Pro	Pro	Arg	Pro	Ala	Met	Pro	Gly	Pro	Ala	Thr	Asp	Ala	Gly	Lys
65					70				75					80	
Ile	Pro	Phe	Cys	Asp	Ala	Lys	Glu	Glu	Ile	Arg	Ala	Gly	Leu	Glu	Ser
			85					90						95	
Ser	Glu	Gly	Gly	Gly	Pro	Glu	Arg	Pro	Gly	Ala	Arg	Gly	Gln	Arg	
			100				105						110		
Gln	Asn	Ile	Val	Trp	Arg	Asn	Val	Val	Leu	Met	Ser	Leu	Leu	His	Leu
			115				120						125		
Gly	Ala	Val	Tyr	Ser	Leu	Val	Leu	Ile	Pro	Lys	Ala	Lys	Pro	Leu	Thr
		130				135						140			
Leu	Leu	Trp	Gly	Lys	Ser	Arg	Arg								
145						150									

<210> 2201

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2201

agtactgcga tggacagcta tgctgtggat ggtgggtcgca aattacatgt ttgtggtaac
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 aaccttgatt gcgatgggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat
 120
 ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt
 180
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa
 240
 cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat
 300
 gatttcttcg tcttacgtga gggcgctgct ggttta
 336

<210> 2202

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2202

Ser	Thr	Ala	Met	Asp	Ser	Tyr	Val	Val	Asp	Gly	Gly	Arg	Lys	Leu	His
1			5					10					15		
Val	Cys	Gly	Asn	Pro	Asp	Cys	Asp	Gly	Tyr	Glu	Val	Glu	Glu	Gly	
		20					25				30				
Glu	Phe	Lys	Ile	Lys	Gly	Tyr	Asp	Gly	Pro	Thr	Ile	Pro	Cys	Asp	Lys
		35				40					45				
Cys	Asp	Gly	Glu	Met	Gln	Leu	Lys	Thr	Gly	Arg	Phe	Gly	Pro	Tyr	Phe
	50					55				60					
Ala	Cys	Thr	Ser	Cys	Asp	Asn	Thr	Arg	Lys	Val	Leu	Lys	Ser	Gly	Gln
65					70					75				80	
Pro	Ala	Pro	Pro	Arg	Val	Asp	Pro	Ile	Lys	Met	Glu	His	Leu	Arg	Ser
			85					90					95		
Thr	Lys	His	Asp	Asp	Phe	Phe	Val	Leu	Arg	Glu	Gly	Ala	Ala	Gly	Leu
			100				105						110		

<210> 2203

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2203

ctcgagagat gcagtcccag ccgggggtggg aagctgtgca gacagccccg gatctgggac
 60
 gtgatggaaa actcaacaga ctggttcaga tcttgccccg gagcccagag gcaccgggga
 120
 cccccagggc tgtttctccc tggccacacc agtaccaccac ttccaaatgc cctgtagggtg
 180
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc
 240
 ctgtccctgc ctccctccga tgtcctgatg gtg
 273

<210> 2204

<211> 88

<212> PRT

<213> Homo sapiens

<400> 2204

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Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
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Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
          20           25           30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
          35           40           45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
          50           55           60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
          65           70           75           80
Ala Ser Leu Arg Cys Pro Asp Gly
          85

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<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

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gnnnnnggng nnnnactggt gtgcatgggt aaaatcctgc aagctactgg gttgccacag
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catctgtccc actttgtgtt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgtccttg aagtggacac ctctctctet tccgtcagca aggagccgca ctgcatgggt
180
gtctttgatc attgcaatga gttttctgtt aacatcaccc aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
cccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

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<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

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Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1           5           10           15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
          20           25           30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
          35           40           45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
          50           55           60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
          65           70           75           80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

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	85		90		95										
Pro	Arg	Lys	Asn	Pro	Ala	Leu	Trp	Asp	Leu	Gly	Ile	Ile	Gln	Ala	Lys
		100					105						110		
Thr	Arg	Ser	Leu	Arg	Asp	Arg	Trp	Ser	Glu	Val	Pro	Arg	Lys	Leu	Glu
		115				120							125		
Phe															

<210> 2207
 <211> 667
 <212> DNA
 <213> Homo sapiens

<400> 2207
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 cgcgagctct ccagcctgca ctactgctc tgggaggccg tcagccagct ggagcagagc
 120
 atagtatcca aactgggacc cctgcctcgg atcctgaggg acgtccacac agcactgagc
 180
 accccaggta gcgggcagct cccagggacc aatgacctgg cctccacacc gggctctggc
 240
 agcagcagca tctcagctgg gctgcagaag atggtgattg agaacgatct ttccggtctg
 300
 atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttggt tttgtcaca
 360
 aggtcctccg gggccagcc ctacactgcc cgcagctcga gttactcgga agccaacgag
 420
 cctgatcttc agatggccaa cgggtggcaag agcctctcca tgggtggacct ccaggacgcc
 480
 cgcacgctgg atggggaggc aggctccccg gcgggccccg acgtcctccc cacagatggg
 540
 caggccgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg
 600
 gcagggctgg ccacgggtgcg gcgggcaggc cagacaccaa ccacaccagg cacctccgag
 660
 ggcgcgc
 667

<210> 2208
 <211> 222
 <212> PRT
 <213> Homo sapiens

<400> 2208
 Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr
 1 5 10 15
 Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu
 20 25 30
 Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu
 35 40 45
 Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser
 50 55 60
 Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly

```

65              70              75              80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
              85              90              95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
              100              105              110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
              115              120              125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
              130              135              140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
145              150              155              160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
              165              170              175
Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
              180              185              190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
              195              200              205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
              210              215              220

```

<210> 2209

<211> 353

<212> DNA

<213> Homo sapiens

<400> 2209

```

ngggaagtgtg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatgggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaaggggtg ggaggcttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggcccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgtttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttgtgtg ctt
353

```

<210> 2210

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2210

```

Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1              5              10              15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
              20              25              30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
              35              40              45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
50              55              60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```


1629

<212> DNA

<213> Homo sapiens

<400> 2213

acgcgtccga ccggcagttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt
60
gccggtgctt cgacacactg gggttatatcg cctcaaagc acaggtctac gaaggttctg
120
acggaaggcc cggccaatcc gatcgcggcc tcggcgctgc gcatcatccg ggcgcgctg
180
tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag
240
atcgccccgt tggtcgacgc gatcacgtca cgggacgagg aagccgccca gcgtgcactg
300
ctcgaccaca atcgacgcgc gttggaa
327

<210> 2214

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2214

Met	Arg	Ser	Pro	Ser	Ile	Ala	Gly	Ala	Ser	Thr	His	Trp	Val	Ile	Ser
1				5				10					15		
Pro	Ser	Lys	His	Arg	Ser	Thr	Lys	Val	Leu	Thr	Glu	Gly	Pro	Ala	Asn
			20				25				30				
Pro	Ile	Ala	Ala	Ser	Ala	Leu	Arg	Ile	Ile	Arg	Ala	Arg	Val	Ser	Gln
		35				40					45				
Leu	Trp	Gly	Thr	Ser	Leu	Leu	Arg	Asn	Gly	Arg	Ala	Glu	Gln	Ser	Val
	50				55				60						
Val	Glu	Ile	Ala	Arg	Leu	Val	Asp	Ala	Ile	Thr	Ser	Arg	Asp	Glu	Glu
65				70				75						80	
Ala	Ala	Gln	Arg	Ala	Leu	Leu	Asp	His	Asn	Arg	Ser	Ala	Leu	Glu	
			85					90						95	

<210> 2215

<211> 430

<212> DNA

<213> Homo sapiens

<400> 2215

ctggggatca tgcctacat cactgcgtcg atcatcctgc agctgctgac agtcgtgatc
60
ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat caccagtagc
120
accggttacc tcactctcgt gcttggcctg ttgcaggcaa cggccttcgt cacgcttgcc
180
acctccggcc gtctattcac cnntgcagct ntgccagtcg tctactccac ctgggtcttc
240
gaagtcgtcg tcatgatcct gactatgacg gccggtacga ccatcgatcat gtggatgggt
300
gagctcatca ccgaccgcgg tatcggaac ggtatgtcga tcatgatttt cactcagatt
360

gcggcgcggtt tccctgactc gctgtggtct atcaaggctc ctcgaaatgg cgccgggtcag
 420
 gctcacgcgt
 430

<210> 2216
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2216
 Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu
 1 5 10 15
 Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser
 20 25 30
 Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu
 35 40 45
 Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg
 50 55 60
 Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe
 65 70 75 80
 Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val
 85 90 95
 Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met
 100 105 110
 Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu
 115 120 125
 Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala
 130 135 140

<210> 2217
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 2217
 accagggccg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcgggct
 60
 atgacgtggc tcgatgacga cgtgggcgcc gacctgttga atcaggctga ttccatggac
 120
 catgccctgg aggccaccgt cccaggtcgg gtcaccacgc cggacgcca agtcatccag
 180
 acctgtgccg tgttgcgtga cettgctcgc gtggcagtca gccagctggg ccgaaatgac
 240
 gaggactcta gggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcgggag
 300
 gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggt gtgggtctct
 360
 gagtctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggttgcta
 420
 cgagagaatg tctttgctca gtcc
 444

<210> 2218

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2218

```

Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr
 1           5           10           15
Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu
      20           25           30
Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro
      35           40           45
Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val
      50           55           60
Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp
      65           70           75           80
Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala
      85           90           95
Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala
      100          105          110
Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser
      115          120          125
Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val
      130          135          140
Phe Ala Gln Ser
145

```

<210> 2219

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2219

```

acgcgtaccg tcgttggcat gagegtcctg ccaactggaaa ttgggtgtgc attcagctac
60
ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccggaag cgggtgggag
120
tggtegatcc ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt
180
ggaatgttcc atagtgtgca gattgcgcgt catgtcagca gttaccacgg catcatggtc
240
gctttcgccg tcgttgggta cggatggctt gcgatgcaca acttgcgtca cctgatgag
300
cgctattcga ttcgctcggc cttgataatc ggcacggca tccagttcac ctgggaggca
360
gtgctgatga tctcgggtat caggccgctg acatggcgcc cgcttggtat cgattctctc
420
atcgagacga atctcggcgc tccgttcatt ttgctcattg tgaaagcttg gcgcgcgcca
480
cccgaaggaa ttcttggtc taccagtccg cgcccgaccg cccgtggcac agcgcgagtc
540
tatatgaggg atgatcttgt ttctcgacgc cttctacagc gtccttgaga gcctctgcga
600
gcgaagggcg cgggtgtagg tctccccggg gctcgttgtg gtcctctctc tgcgtgacgc
660

```

agagccgtgt gatgaggcga agtcatga
688

<210> 2220

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2220

Met	Ser	Val	Leu	Pro	Leu	Glu	Ile	Trp	Leu	Ser	Phe	Ser	Tyr	Gly	Ile
1			5					10						15	
Thr	Asn	Met	Ala	Trp	Met	Trp	Leu	Trp	Phe	Asp	Glu	Pro	Gly	Asn	Arg
		20				25						30			
Trp	Glu	Trp	Ser	Ile	Leu	Phe	Pro	Ala	Gly	Trp	Leu	Thr	Ser	Ala	Leu
		35				40					45				
Val	Ser	Gln	Gly	Phe	Gly	Gly	Met	Phe	His	Ser	Val	Gln	Ile	Ala	Arg
	50				55					60					
His	Val	Ser	Ser	Tyr	His	Gly	Ile	Met	Val	Ala	Phe	Ala	Leu	Val	Gly
65				70					75					80	
Tyr	Gly	Trp	Leu	Ala	Met	His	Asn	Leu	Arg	His	Pro	Asp	Glu	Arg	Tyr
			85					90						95	
Ser	Ile	Arg	Ser	Ala	Leu	Ile	Ile	Gly	Ile	Gly	Ile	Gln	Phe	Thr	Trp
		100						105				110			
Glu	Ala	Val	Leu	Met	Ile	Ser	Gly	Ile	Arg	Pro	Leu	Thr	Trp	Arg	Pro
		115					120					125			
Leu	Val	Ile	Asp	Ser	Leu	Ile	Glu	Thr	Asn	Leu	Gly	Ala	Pro	Phe	Met
	130					135					140				
Leu	Leu	Ile	Val	Lys	Ala	Trp	Arg	Ala	Pro	Pro	Glu	Gly	Ile	Pro	Gly
145				150						155				160	
Ser	Thr	Ser	Pro	Arg	Pro	Thr	Ala	Arg	Gly	Thr	Ala	Arg	Val	Tyr	Met
			165						170					175	
Arg	Asp	Asp	Leu	Val	Ser	Arg	Arg	Leu	Leu	Gln	Arg	Pro			
			180						185						

<210> 2221

<211> 530

<212> DNA

<213> Homo sapiens

<400> 2221

actagtgtag ctgcaatata tactcgggat ttactacagt taagccttat ccttccaccc
60
aaagaagagc aaaccgccat cgctaacgtc ctttccgaca tggacaccga actcgacgcc
120
ctacaacaac gcctcagtaa aaccaaaacc atcaagcaag gcatgatgca agaactactc
180
acagggaaaa cgaggttggt atgagccaca aggtgaattt agtgcattgag ctggataagc
240
gtattatctc ggtaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc
300
ggccttataa atggtcacaa gagaacctaa atgcgctgat gattgattta cgaatttatc
360
gtaacaaatc ggcttatcgg ctggggacgg tgggttttca ttatcataat gaaccgtag
420

acaacgagaa tacccacaag ctggatattg tagacgggtca gcaacgtacc ttaaccttgt
 480
 tgctgctagt caaagccatt ttagaagaac ggttgctctgc gttaacgcgt
 530

<210> 2222

<211> 67

<212> PRT

<213> Homo sapiens

<400> 2222

Thr	Ser	Val	Ala	Ala	Ile	Tyr	Thr	Arg	Asp	Leu	Leu	Gln	Leu	Ser	Leu
1				5				10					15		
Ile	Leu	Pro	Pro	Lys	Glu	Glu	Gln	Thr	Ala	Ile	Ala	Asn	Val	Leu	Ser
		20					25				30				
Asp	Met	Asp	Thr	Glu	Leu	Asp	Ala	Leu	Gln	Gln	Arg	Leu	Ser	Lys	Thr
	35					40				45					
Lys	Thr	Ile	Lys	Gln	Gly	Met	Met	Gln	Glu	Leu	Leu	Thr	Gly	Lys	Thr
	50				55					60					
Arg	Leu	Val													
65															

<210> 2223

<211> 482

<212> DNA

<213> Homo sapiens

<400> 2223

cggccgcccgc ggtagtgagc cctgcgtcgg tggcgtaatg gaaaatgctg cgctgggttg
 60
 acaggcgcca gacattgttg tggacgatgc cgctgtcgat cgggtggcacg ccggtgaaga
 120
 tgcatttacc caacggcccg gacagggccg gcagttcaca gtccagtttg taaagcgctg
 180
 cgcgctcctgc gctgatatag gcttgagat gcccattggc gtgtcgggca acctcgtagt
 240
 tcaggccgctc gagcaccaca aggatgacgt tgtgtttcat aaggggagac gctccgcaac
 300
 gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtggggcg gggcaagccc
 360
 gctccacac aagcccgctgc ccacattgga tctccaatgt gggtacagc cttactgcat
 420
 attgatgatg acttcttctt gccacttctg cggcagtgcc ttggaggtct tttcccacgc
 480
 gt
 482

<210> 2224

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2224

Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn

```

      1             5             10             15
Val Ile Leu Val Val Leu Asp Gly Leu Asn Tyr Glu Val Ala Arg His
      20             25             30
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu
      35             40             45
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys
      50             55             60
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn
      65             70             75             80
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr
      85             90             95
Asp Ala Gly Leu Thr Thr Ala Ala Ala
      100             105

```

<210> 2225

<211> 753

<212> DNA

<213> Homo sapiens

<400> 2225

```

naccgctctg atccacacgg gccactgacg tggcggttatg acagggagcg ggccggtgccc
60
ggcgctcatcc tcgatctcat gggtcacgga gaggatctcg tccagtatct actcaaaggg
120
cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgctcc caagccactc
180
aaggagggca tcggccacac aggttgggtc gtctcggacg agctcggggc ggtgggcaac
240
gaggattatt gcgctgtcat cggccgtatg gaaaacggag tgatgtgcac cctggagtcc
300
agtcgggtca gtgttgggccc gcgcgcggag tacatcgctg agatctatgg aaccgacgga
360
tcaatccggg ggaacttcga ggatctcaac catttgacgg tctgtctggg gcgaaacaat
420
cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccgga gttcatgcgt
480
ttccaaccgg gagccggaac atccatgggc ttgacgaca tgaaggctgt tgaggctgcg
540
aaattcgtec gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatgggttg
600
gcctcagcgg aggtcaacga tgcgatcgtt gcctcctgcg ggggaccatg cctggcatga
660
cgtgaagccg gtttcgggga gaaccacgtt cgataagtga ccgcgtcatc gcgtgtctgt
720
gaccaggcct ggcggcacaa ccaggtcgcc ggc
753

```

<210> 2226

<211> 219

<212> PRT

<213> Homo sapiens

<400> 2226

```

Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

```

```

1           5           10           15
Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp
20           25           30
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val
35           40           45
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile
50           55           60
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
65           70           75           80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
85           90           95
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile
100          105          110
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp
115          120          125
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
130          135          140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg
145          150          155          160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
165          170          175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
180          185          190
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala
195          200          205
Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala
210          215

```

<210> 2227

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2227

```

ggatccgaaa cggtgggagc ataaagcagc atggcgcacc tactgaagac ggtggtggct
60
ggctgttcat gtcctttcct tagcaacttg gggctcctta aggttctacc tgggaagaga
120
gactttgtac gaacgcttcg tactcaccag gcactgtggt gtaaattcccc ggtaaagcca
180
ggaattccat ataagcagtt gacagttggg gtccccaagg agattttcca aaacgagaag
240
cgagttgcat tgtctctgc ggggggtccag gccctggtca agcagggctt caatgttgtc
300
gtggaatcag gcgcaggcga agct
324

```

<210> 2228

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2228

```

Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe

```


1 5 10 15
 Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
 20 25 30
 Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
 35 40 45
 Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
 50 55 60
 Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
 65 70 75 80
 Ala Leu Val Lys Gln Gly Phe Asn Val Val Val Glu Ser Gly Ala Gly
 85 90 95
 Glu Ala

<210> 2229

<211> 320

<212> DNA

<213> Homo sapiens

<400> 2229

acgcgtgaag gggccctgtg acgaggtcat ttctgtccat ggggggtcca gatggtgagg
 60
 cccacagaga gggaacgggc ggggggaggg gaggagagaa gacagactca ggcagaaccc
 120
 tagctcagcc ccttctgtcg tgcttgcccc tgggaggatg ccatccccag tccctcttc
 180
 tgggccctgc tctggggact cggcacagat ggatccagtg catcctcagc cccctgagaa
 240
 gctgtgctgc catcagctcc ttctctgggt acagggcacg ggaagcggct gcccagcagg
 300
 cctcggtccc gccaaactgt
 320

<210> 2230

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2230

Met Gly Gly Pro Asp Gly Glu Ala His Arg Glu Gly Thr Gly Gly Gly
 1 5 10 15
 Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
 20 25 30
 Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
 35 40 45
 Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
 50 55 60
 Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
 65 70 75 80
 Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
 85 90

<210> 2231

<211> 671

<212> DNA

<213> Homo sapiens

<400> 2231

```

gggctgtcta ccacgggctt cgggacttgg ggcagcttcc tgagctctct gagctgcagt
60
tccttcaacc acaaaatgag gagagtgcag gacctcagag gcttactgtg aggatggaga
120
aaagcccagt tcaatgcccc actgggaaat gcttcccatt aattgtggaa ttgtcgtgcc
180
catttactgt cggggtgaca gggggggtgg gggtcagagt agagacagga gaaggaagtg
240
agcatttgtg ggatacccac cacgtgccag ggactgaacc ctatctggat ctctgcagc
300
cctcccaatg gcactgtgaa gccagtgttg ttttacagat gaggaaactg agatttgtgg
360
ctataacaga taaacagatg accctgaatg gggcagggtca tgtcatctgc catagataca
420
tgcatagaac aatgcaaacc agtcagtccc ctctgagtca gaccaggctg accatcaggg
480
acatgcagac actggcaggg ctgggggtgt tccccatcgg tgatagcctg gtgccccat
540
ggccccctgat gccacggct gtctggaagg ctgggtcact gctgagaaga caaggagaca
600
ttttctctca ccagctttct tttttctatt ctttcttaga cacctgagct gcggtgatca
660
cagctcttaa g
671

```

<210> 2232

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2232

```

Met Glu Lys Ser Pro Val Gln Cys Pro Thr Gly Lys Cys Phe Pro Leu
1      5      10      15
Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val
20     25     30
Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr
35     40     45
His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
50     55     60
Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg
65     70     75     80
Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
85     90     95
Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser
100    105    110
Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala
115    120    125
Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro
130    135    140
Leu Met Pro Thr Ala Val Trp Lys Ala Gly Ser Leu Leu Arg Arg Gln

```

145 150 155 160
 Gly Asp Ile Phe Ser His Gln Leu Ser Phe Phe Tyr Ser Phe Leu Asp
 165 170 175
 Thr

<210> 2233
 <211> 6199
 <212> DNA
 <213> Homo sapiens

<400> 2233
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<212> PRT

<213> Homo sapiens

<400> 2234

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Leu Ala Ala Met Glu Leu Ala Gln Met Val Thr Gln Ala Met Trp Ser					
1505		1510		1515	1520
Lys Asp Ser Tyr Leu Lys Gln Leu Pro His Phe Thr Ser Glu His Ile					
1525		1530		1535	
Lys Arg Cys Thr Asp Lys Gly Val Glu Ser Val Phe Asp Ile Met Glu					
1540		1545		1550	
Met Glu Asp Glu Glu Arg Asn Ala Leu Leu Gln Leu Thr Asp Ser Gln					
1555		1560		1565	
Ile Ala Asp Val Ala Arg Phe Cys Asn Arg Tyr Pro Asn Ile Glu Leu					
1570		1575		1580	
Ser Tyr Glu Val Val Asp Lys Asp Ser Ile Arg Ser Gly Gly Pro Val					
1585		1590		1595	1600
Val Val Leu Val Gln Leu Glu Arg Glu Glu Glu Val Thr Gly Pro Val					
1605		1610		1615	
Ile Ala Pro Leu Phe Pro Gln Lys Arg Glu Glu Gly Trp Trp Val Val					
1620		1625		1630	
Ile Gly Asp Ala Lys Ser Asn Ser Leu Ile Ser Ile Lys Arg Leu Thr					

1635 1640 1645
 Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr
 1650 1655 1660
 Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly
 1665 1670 1675 1680
 Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr
 1685 1690 1695
 Asp Ser Asp Ser Asp
 1700

<210> 2235
 <211> 586
 <212> DNA
 <213> Homo sapiens

<400> 2235
 tctagaatga gtatgaggac actctcacca gagtgagggtg aaggtgtata cagctggcac
 60
 tcagtgccttg cacattctcc actggcagaa tgactcccgga cgtggctcgg gctccccgga
 120
 agacacccct cgaagcagtg gtgcctctag catcttcgac ctgaggaacc tggcagctga
 180
 ctcattgttg cctctctgc tagagcgggc ggccccagaa gatgtggacc ggcgcaatga
 240
 agcccttcga cggcagcacc ggcccccggc cctgcttccc ctctaccggg cacctgacga
 300
 ggatgaagcc ggggaacgct gtagccgct agagccaccc ccgagagcac ttggacaaa
 360
 ggatcttggt caagtgtctg tcgctcaagt tcgagattga aattgagccc atctttggga
 420
 tcttggtctt gtatgatgtg cggaagaaaa agaagatctc ggaaaacttc tacttcgacc
 480
 tgaactcgga ctccatgaag gggctgcttc gggctcatgg caccaccct gccatctcca
 540
 ccctggcccg ctctgccatc ttctctgtga cctaccctc acgcgt
 586

<210> 2236
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 2236
 Met Ser Pro Lys Gln Pro Leu His Gly Val Arg Val Gln Val Glu Val
 1 5 10 15
 Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln
 20 25 30
 Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr
 35 40 45
 Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly
 50 55 60
 Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly
 65 70 75 80
 Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

85 90 95
 Gly Pro His Leu Leu Gly Pro Pro Ala Leu Ala Glu Arg Ala Thr Met
 100 105 110
 Ser Gln Leu Pro Gly Ser Ser Gly Arg Arg Cys
 115 120

<210> 2237

<211> 421

<212> DNA

<213> Homo sapiens

<400> 2237

cctaggaagg cacacctgtg tcccactgca gccaaagagga agcaccccaa acactcctct
 60
 tggggcgag gagtgctggc cagcttgggg atagtccctg gaagtggctg ggagcactga
 120
 gggaggagct gaggtccaag cctcctcca gtgcatcacc ctggtcagga gtggggcagt
 180
 gtggagccag gggctcttca gccagcacct gctgcactat gggctccagc tgtcaagac
 240
 caccctgtag aaggagtctt gttgggagca ggggtgggaa gcactgtggg agaggtgtcc
 300
 ttggctcggg tagcaggagc cttgatgtat cttgaagcca gggggccgac tgaggcgctt
 360
 gtctgaaggc ctccatgaga gggagggggc tggagggggc tgttcccaat aatagctcta
 420
 t
 421

<210> 2238

<211> 124

<212> PRT

<213> Homo sapiens

<400> 2238

Met Glu Ala Phe Arg Gln Ala Pro Gln Ser Ala Pro Trp Leu Gln Asp
 1 5 10 15
 Thr Ser Arg Ser Leu Leu Pro Glu Pro Arg Thr Pro Leu Pro Gln Cys
 20 25 30
 Phe Pro Thr Leu Leu Pro Thr Arg Leu Leu Leu Thr Gly Gly Leu Ala
 35 40 45
 Gln Leu Glu Pro Ile Val Gln Gln Val Leu Ala Glu Glu Pro Leu Ala
 50 55 60
 Pro His Cys Pro Thr Pro Asp Gln Gly Asp Ala Leu Glu Glu Gly Leu
 65 70 75 80
 Asp Leu Ser Ser Ser Leu Ser Ala Pro Asp His Phe Gln Gly Leu Ser
 85 90 95
 Pro Ser Trp Pro Ala Leu Leu Arg Pro Lys Arg Ser Val Trp Gly Ala
 100 105 110
 Ser Ser Trp Leu Gln Trp Asp Thr Gly Val Pro Ser
 115 120

<210> 2239

<211> 623

<212> DNA

<213> Homo sapiens

<400> 2239

gctagcagga ctcagaaatc tgctgttgag cacaaagcca aaaaatctct gtcccatcct
 60
 agccattcca ggctggggcc catggtcacc ccacacaata aggctaagag tccaggtgtc
 120
 aggcagccag gcagcagctc tagctcagcc cctgggcagc ccagcacagg ggttgctcga
 180
 cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctcaggacct
 240
 gaggatcaa tcagtgggtc caagaagcca accaatgact caaatccctc taggcggaca
 300
 gtcagtggta catgtggccc tggacaacct gcaagcagct caggtggccc tgggcgaccc
 360
 atcagtgggt cagttagttc tgcaagacct ttgggcagct ctcgtggccc tggccggcct
 420
 gtgagcagtc cacatgaact tcgacgacca gtgagtggct tgggcccccc ggggcggtct
 480
 gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggacggac tgtcagtaat
 540
 tcagtcccgag gaagaccagt gagcagcttg ggacctgggc aaacagttag tagctcaggt
 600
 cccactataa agcctaagtg cac
 623

<210> 2240

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2240

Ala	Ser	Arg	Thr	Gln	Lys	Ser	Ala	Val	Glu	His	Lys	Ala	Lys	Lys	Ser
1				5					10					15	
Leu	Ser	His	Pro	Ser	His	Ser	Arg	Pro	Gly	Pro	Met	Val	Thr	Pro	His
		20					25						30		
Asn	Lys	Ala	Lys	Ser	Pro	Gly	Val	Arg	Gln	Pro	Gly	Ser	Ser	Ser	Ser
		35					40					45			
Ser	Ala	Pro	Gly	Gln	Pro	Ser	Thr	Gly	Val	Ala	Arg	Pro	Thr	Val	Ser
	50					55				60					
Ser	Gly	Pro	Val	Pro	Arg	Arg	Gln	Asn	Gly	Ser	Ser	Ser	Ser	Gly	Pro
65					70					75				80	
Glu	Arg	Ser	Ile	Ser	Gly	Ser	Lys	Lys	Pro	Thr	Asn	Asp	Ser	Asn	Pro
			85						90					95	
Ser	Arg	Arg	Thr	Val	Ser	Gly	Thr	Cys	Gly	Pro	Gly	Gln	Pro	Ala	Ser
			100					105					110		
Ser	Ser	Gly	Gly	Pro	Gly	Arg	Pro	Ile	Ser	Gly	Ser	Val	Ser	Ser	Ala
		115				120						125			
Arg	Pro	Leu	Gly	Ser	Ser	Arg	Gly	Pro	Gly	Arg	Pro	Val	Ser	Ser	Pro
	130					135					140				
His	Glu	Leu	Arg	Arg	Pro	Val	Ser	Gly	Leu	Gly	Pro	Pro	Gly	Arg	Ser
145					150					155				160	
Val	Ser	Gly	Pro	Gly	Arg	Ser	Ile	Ser	Gly	Pro	Ile	Pro	Ala	Gly	Arg

```
<210> 2241
<211> 656
<212> DNA
<213> Homo sapiens
```

```
<210> 2242
<211> 218
<212> PRT
<213> Homo sapiens
```

1650

```

      100      105      110
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
      115      120      125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
      130      135      140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
145      150      155      160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
      165      170      175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
      180      185      190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
      195      200      205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
      210      215

```

<210> 2243
 <211> 384
 <212> DNA
 <213> Homo sapiens

```

<400> 2243
gaattcagca tttaaagtgc actcgttggc atgcaatttg ctgtcatgaa aacgactgtg
60
gattcatttc ctggttaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
120
aaaaaaccaa atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaataaa
180
tccctaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtcttggtg
240
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
300
ggttctgctt cctccttgcc cactctcttt gcgccctccc tgtgctcgcc tgtcttgttt
360
tacctcccat cctgggcctt tgga
384

```

<210> 2244
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 2244
Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
1      5      10      15
Trp Ala Arg Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
      20      25      30
His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
      35      40      45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
      50      55      60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
65      70      75      80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

```

85 90 95
 Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser
 100 105

<210> 2245
 <211> 632
 <212> DNA
 <213> Homo sapiens

<400> 2245
 acgcgtgcga ttaccgtcaa ggctggtgtg gtgagcgtcg atctgcacga gcggacgtct
 60
 tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgtatt
 120
 gagggccaca agcatttcac gtggcgctcat ggcgaggctg acgcggtggg catggtgttt
 180
 gcggccgaac tgctgcaccg gtacctggga ctgtccgatg aggtcgttgc gcgcaccgc
 240
 actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg
 300
 cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg
 360
 ttgcgggttg tcggtattca caaaccgggt caggctcgcca tgatecgtga ccctgacgag
 420
 gccgcttttag ccgagtgtga cgaccgggtg tccgcacggt aaaaacgttc ggaaatgaac
 480
 atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgaccc caagtgatgt
 540
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcttgattcc ccataccgga
 600
 cttaagttca gtatcgacgg catgaatccg ga
 632

<210> 2246
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2246
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His
 1 5 10 15
 Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr
 20 25 30
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp
 35 40 45
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu
 50 55 60
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg
 65 70 75 80
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys
 85 90 95
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val
 100 105 110
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys


```
<210> 2247
<211> 324
<212> DNA
<213> Homo sapiens
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```
<210> 2248
<211> 105
<212> PRT
<213> Homo sapiens
```

```
<210> 2249
<211> 394
<212> DNA
<213> Homo sapiens
```

1653

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cgggggtttc ccattccac
 120
 ggtggaaacc gcggccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa
 180
 aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcggtt tagcaccctc
 240
 ccggcttttc tcccgaccgc gtgcagggcg ggctgcgctg ggctgggag gaactgggag
 300
 ctgggggctc atgtcctgta taaaggggct gcaggggcgc tgtctcccc cagaagactg
 360
 gccacatggg gacaggcctc ctgggggcag atct
 394

<210> 2250

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2250

Met	Ser	Pro	Gln	Leu	Pro	Val	Pro	Pro	Arg	Pro	Ser	Ala	Ala	His	Pro
1			5						10					15	
Ala	Arg	Gly	Arg	Glu	Lys	Ser	Arg	Glu	Gly	Ala	Lys	Pro	Asn	Ser	Cys
			20					25					30		
Lys	Phe	His	His	Thr	Gly	Gly	Arg	Leu	Thr	Leu	Pro	Phe	Lys	Gly	Pro
		35					40					45			
Phe	Arg	Leu	Lys	Glu	Ala	Asp	Phe	Asn	Ser	Leu	Ala	Ala	Val	Ser	Thr
	50					55					60				
Val	Gly	Met	Gly	Lys	Pro	Arg	Gly	Ser	Gln	Leu	Asn	Cys	Phe	Leu	Thr
65					70					75				80	
Phe	Pro	Cys	Gly	Leu	Ser	Trp	Leu	Leu	Leu	Pro	Glu	Leu	Arg	Gly	Leu
			85					90						95	
Tyr	Thr	Pro	Cys	Tyr	Pro	Val	Phe								
			100												

<210> 2251

<211> 654

<212> DNA

<213> Homo sapiens

<400> 2251

acgcgtactt attcgccacc atgattatga ccagtgtttc cagtcggttc agttgttgca
 60
 gtggaatagt cagggttaaatt ttaatgtgac cgtttatcgc aatctgccga ccaactcgca
 120
 ttcaatcatg acttcgtgat aaaagattga gtgtgaggtt ataacgccga agcggtaaaa
 180
 attttaattt ttgccgctga ggggttgacc aagcgaagcg cggtagggtt tctgcttagg
 240
 agtttaataca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag
 300
 ctggttctca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct
 360
 acatcgtaaa cgttatattt tgatagtttg acgggttaatg ctggtaatgg tgggtttctt
 420

cattgcattc agatggatac atctgtcaac gccgctaatac aggttggttc tgttggtgct
 480
 gatattgctt ttgatgccga ccttaaattt ttgacctgtt tggttcgctt tgagtcttct
 540
 tcggttccga ctacctccc gactgcctat gatgtttatc ctttgatgg tcgccaatgat
 600
 ggtggttatt ataccgtcaa ggactgtgtg actattgacg tcttctctcg tacg
 654

<210> 2252

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2252

Met	Phe	Gln	Thr	Phe	Ile	Ser	Arg	His	Asn	Ser	Asn	Phe	Phe	Ser	Asp
1			5					10						15	
Lys	Leu	Val	Leu	Thr	Ser	Val	Thr	Pro	Ala	Ser	Ser	Ala	Pro	Val	Leu
		20						25					30		
Gln	Thr	Pro	Lys	Ala	Thr	Ser	Ser	Thr	Leu	Tyr	Phe	Asp	Ser	Leu	Thr
		35					40					45			
Val	Asn	Ala	Gly	Asn	Gly	Gly	Phe	Leu	His	Cys	Ile	Gln	Met	Asp	Thr
	50					55					60				
Ser	Val	Asn	Ala	Ala	Asn	Gln	Val	Val	Ser	Val	Gly	Ala	Asp	Ile	Ala
65					70					75				80	
Phe	Asp	Ala	Asp	Pro	Lys	Phe	Phe	Ala	Cys	Leu	Val	Arg	Phe	Glu	Ser
			85						90					95	
Ser	Ser	Val	Pro	Thr	Thr	Leu	Pro	Thr	Ala	Tyr	Asp	Val	Tyr	Pro	Leu
		100						105					110		
Asp	Gly	Arg	His	Asp	Gly	Gly	Tyr	Tyr	Thr	Val	Lys	Asp	Cys	Val	Thr
		115					120					125			
Ile	Asp	Val	Leu	Pro	Arg	Thr									
	130					135									

<210> 2253

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2253

ggatcctgct gggcctcttt tacgtgatgt tgaccagcc gctggtgcgc attattcgcg
 60
 cactgagcac cagcaagcag gcccgcttgg attgccacc gggtcacgaa aacgatgaaa
 120
 tcggcgtatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc
 180
 agcgccgcca cgccgaggac cgctcaccg aatacctggg ccaactggaa gatatcgtct
 240
 ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc
 300
 tggaagcggc aaagttgacc gccttgg
 327

<210> 2254

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2254

```

Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser
 1             5             10             15
Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile
          20          25          30
Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr
      35          40          45
Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu
      50          55          60
Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala
65          70          75          80
Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys
          85          90          95
Leu Thr Ala Leu
          100

```

<210> 2255

<211> 357

<212> DNA

<213> Homo sapiens

<400> 2255

```

nngctagcac atgagaagtg tgaagtttat actttgcttg ggcgatcacg ccgttttcca
60
aatatggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct
120
cctgtacagg gcagtgcagc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat
180
actcgtctta aggagcttgg ttggacgcta ctcttgacagg tgcattgatga agtgatactg
240
gaagggcctt cagagtctgc ggagtnggcc aagtccatag ttgttgagtg catgtctaag
300
cccttctatg gcaccaatat cctgaggggc gaccttgctg ttgatgccaa gtgtgca
357

```

<210> 2256

<211> 119

<212> PRT

<213> Homo sapiens

<400> 2256

```

Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser
 1             5             10             15
Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His
      20          25          30
Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp
      35          40          45
Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys
      50          55          60
Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu

```

1657

				85						90					95				
Leu	Thr	Asp	Gly	Thr	Thr	Val	Gly	Asn	Asp	Asp	Asp	Gly	Leu	Asn	Gln				
			100					105					110						
Gln	Ile	Pro	Arg	Lys	Glu	Asn	Glu	Glu	His	Asp	Arg	Pro	Ala	Asp	Lys				
		115					120					125							
Thr	Ala	Asn	Glu	Lys	Asn	Lys	Val	Lys	Asn	Gln	Ile	Tyr	Pro	Glu	Ala				
	130					135				140									
Asp	Phe	Ala	Asp	Ser	Met	Glu	Pro	Ser	Glu	Ile	Ala	Ser	Glu	Asp	Cys				
145					150				155					160					
Glu	Leu	Ser	His	Ser	Val	Tyr	Glu	Asn	Phe	Met	Leu	Leu	Ile	Glu	Gln				
			165					170					175						
Leu	Arg	Met	Glu	Tyr	Lys	Gly	Arg	Thr	Thr	Ala									
		180					185												

<210> 2259

<211> 425

<212> DNA

<213> Homo sapiens

<400> 2259

acgcgtcaca atgataaagc cattatattc atcaagaggt aaatcattct tgaaattttc
60

taaaggtaaa cacttacgtg taacacgttc atcaaagaat tcaggaacca catattctgg
120

acggtcatct acgactgtaa cagcacagcc aataaacaat agcaaatacag taatagctcg
180

gctaacatga cctgcaccta atacgagaac tgacggatca ttttctacag gttgtacgaa
240

acactccatt tcgcctacca tgcatagaga attcagcttt gctttatcta cagtaaatcc
300

ttcaatagga gtccgtata gaacccttcc atcttcagca taaatagtct tatecccttg
360

acgaggaccg gatagaacgg taaccattac ggtagcttca gtaacctgta gacgattttt
420

catga

425

<210> 2260

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2260

Met	Lys	Asn	Arg	Leu	Gln	Val	Thr	Glu	Ala	Thr	Val	Met	Val	Thr	Val
1				5				10				15			

Leu	Ser	Gly	Pro	Arg	Gln	Gly	Asp	Lys	Thr	Ile	Tyr	Ala	Glu	Asp	Gly
		20					25					30			

Arg	Val	Leu	Tyr	Gly	Thr	Pro	Ile	Glu	Gly	Phe	Thr	Val	Asp	Lys	Ala
	35				40					45					

Lys	Leu	Asn	Ser	Leu	Cys	Met	Val	Gly	Glu	Met	Glu	Cys	Phe	Val	Gln
50					55				60						

Pro	Val	Glu	Asn	Asp	Pro	Ser	Val	Leu	Val	Leu	Gly	Ala	Gly	His	Val
65				70				75						80	

Ser	Arg	Ala	Ile	Thr	Asp	Leu	Leu	Leu	Phe	Ile	Gly	Cys	Arg	Val	Thr
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	85		90		95										
Val	Val	Asp	Asp	Arg	Pro	Glu	Tyr	Val	Val	Pro	Glu	Phe	Phe	Asp	Glu
	100		105		110										
Arg	Val	Thr	Arg	Lys	Cys	Leu	Pro	Leu	Glu	Asn	Phe	Lys	Asn	Asp	Leu
	115		120		125										
Pro	Leu	Asp	Glu	Tyr	Asn	Gly	Phe	Ile	Ile	Val	Thr	Arg			
	130		135		140										

<210> 2261
 <211> 660
 <212> DNA
 <213> Homo sapiens

<400> 2261
 ngctagctgc tgctcctgag gatcgggcgc agaattattgc tgccgatctg tccgggttgc
 60
 ttgagcccaa ggcgagagtc gatgtgtccg gcgaccgcgc gcgttgcggt gggagcatag
 120
 tgtcgggtgca cgctgaccga gaggtccgtg cygagagtac tcccgatgat atttgccggc
 180
 agctcgatgc cgtggccgcc atgatggccc ttgtctatgg gtccaatgtg actattcccg
 240
 acgatgccgg gaggtctcttc gacaagcttc actgaacggg gttcaattgg tcccaacggc
 300
 tgcccatgtg ggcagccgct ctatctcgtc atgggaagga acccgatgac gtcacgcaat
 360
 ggtttccagg ccaccgacct ggcctcttct gcggtctttg cagccctcat tgetgtgcta
 420
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 480
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<210> 2262
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2262
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 Asn Pro Met Ser Ser Arg Asn Gly Phe Gln Ala Thr Asp Leu Ala Leu
 35 40 45
 Ile Ala Val Phe Ala Ala Leu Ile Ala Val Leu Ala Val Ile Pro Pro
 50 55 60
 Met Phe Met Val Gly Ala Val Pro Phe Ala Leu Gln Met Val Ala Val
 65 70 75 80
 Met Leu Ala Pro Met Val Leu Gly Ser Ile Arg Gly Gly Cys Ala Val

85 90 95
 Gly Leu Tyr Ile Leu Val Gly Ala Leu Gly Leu Pro Val Phe Ser Gly
 100 105 110
 Gly Ser Ser Gly Ile Gly Val Leu Val Gly Pro Thr Gly Gly Tyr Leu
 115 120 125
 Trp Gly Trp Leu Ile Gly Ala Phe Val Ala Gly
 130 135

<210> 2263

<211> 491

<212> DNA

<213> Homo sapiens

<400> 2263

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 180
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 240
 ccgtccgagc aagccagggt accaaaagga cgtccattgg tccacgtggc tattggacac
 300
 cctatggacc ctgttccccg cgagatcgcc caccaattct ccgaacggat tcgtcgccag
 360
 gtcattgagt tgcacgacca aaccgcccgc gcctacggca tgccaacct tgacgaatac
 420
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 480
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<210> 2264

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2264

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 20 25 30
 Gly Val Pro Leu Leu Ile Phe Pro Glu Gly Thr Arg Ser Arg Thr Gly
 35 40 45
 Ala Met Gly Thr Phe Lys Pro Gly Ala Ala Ala Leu Ala Ile Ser Arg
 50 55 60
 Gly Val Pro Val Ile Pro Ile Ala Leu Val Gly Ala Trp Ala Ala Met
 65 70 75 80
 Pro Ser Glu Gln Ala Arg Leu Pro Lys Gly Arg Pro Leu Val His Val
 85 90 95
 Ala Ile Gly His Pro Met Asp Pro Val Pro Gly Glu Ile Ala His Gln
 100 105 110
 Phe Ser Glu Arg Ile Arg Arg Gln Val Ile Glu Leu His Asp Gln Thr

115 120 125
 Ala Arg Ala Tyr Gly Met Pro Thr Leu Asp Glu Tyr Gly Arg His Arg
 130 135 140
 Ala Leu Ser Gln Ala Ser Glu Ser Gly Asp Thr Ala Ser Thr Asn His
 145 150 155 160
 Ser Thr Cys

<210> 2265
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 2265
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 120
 cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac
 180
 cggaagggtc cggaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata
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 300
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 328

<210> 2266
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2266
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 Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu
 20 25 30
 Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly
 35 40 45
 Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly
 50 55 60
 Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile
 65 70 75 80
 Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu
 85 90 95
 Thr Pro Asn Leu
 100

<210> 2267
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 2267

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 120
 cgagggagcc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac
 180
 agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg
 240
 gacagagatg gtgaagcagg catgtcctaa agcctccctt cttaaccttg accttgaagg
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 370

<210> 2268

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2268

Met	Ala	Asp	His	Gly	Gly	Leu	Met	Gln	Ala	Gly	Lys	Ala	Arg	Gln	Ser
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Ser	Gln	Lys	Gln	Val	Thr	Glu	Gly	Ala	Thr	Thr	Glu	Leu	His	Ser	Arg
			20					25					30		
Trp	Gly	Val	Lys	Pro	Tyr	Pro	Pro	Lys	Thr	Ala	Val	Thr	Gly	Val	Ala
		35					40					45			
Asn	Leu	Tyr	Arg	Asp	Arg	Leu	Lys	Ala	Thr	Ala	Thr	Gln	Gly	Thr	Glu
	50					55					60				
Met	Val	Lys	Gln	Ala	Cys	Pro	Lys	Ala	Ser	Leu	Leu	Asn	Pro	Asp	Leu
65					70					75				80	
Glu	Gly	Gln	Glu	Thr	Ser	His	Leu	Arg	Met	Leu					
				85						90					

<210> 2269

<211> 507

<212> DNA

<213> Homo sapiens

<400> 2269

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 180
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 240
 caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgccgccaa atgcgattat
 300
 ccccttcatt tgggcgttac tgagctgggt ccggccttcc aaggcaccat caagtcggcg
 360
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 420

gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt
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507

<210> 2270

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2270

Leu	Ser	Asp	Arg	Val	Asn	Pro	Gly	Asn	Ile	Arg	Lys	Phe	Asp	Asp	Gln
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Ile	Glu	Ser	Ile	Cys	Lys	Ala	Ala	Thr	Glu	His	Gly	Thr	Ser	Ile	Arg
			20					25					30		
Ile	Gly	Val	Asn	Ala	Gly	Ser	Leu	Asp	Lys	Arg	Leu	Leu	Asp	Lys	Tyr
		35					40					45			
Gly	Ala	Pro	Thr	Ala	Glu	Ala	Met	Val	Glu	Ser	Ala	Leu	Trp	Glu	Ala
	50					55					60				
Ser	Leu	Phe	Glu	Gln	Tyr	Gly	Phe	Arg	Asp	Phe	Lys	Ile	Ser	Val	Lys
65				70					75					80	
His	His	Asp	Pro	Val	Met	Ile	Arg	Ala	Tyr	Glu	Gln	Leu	Ala	Ala	
			85				90					95			
Lys	Cys	Asp	Tyr	Pro	Leu	His	Leu	Gly	Val	Thr	Glu	Ala	Gly	Pro	Ala
			100				105					110			
Phe	Gln	Gly	Thr	Ile	Lys	Ser	Ala	Val	Ala	Phe	Gly	His	Leu	Leu	Ala
	115						120					125			
Glu	Gly	Ile	Gly	Asp	Thr	Ile	Arg	Val	Ser	Leu	Ser	Ala	Asp	Pro	Val
	130					135					140				
Glu	Glu	Val	Lys	Val	Gly	Ile	Lys	Ile	Leu	Glu	Ser	Leu	Asn	Leu	Arg
145			150						155					160	
Pro	Arg	Gly	Leu	Glu	Ile	Val	Ser	Cys							
															165

<210> 2271

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2271

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120
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180
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240
gaggcggact ttatccgcca cctggcgggc gacgagatga ctgatgccgg ccatatcgaa
300
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360
atgctcgtcg gggtcatect gatcgacacc gccggtgcgg ccgtgggcaa atgcaacggg
420

ctgacgggtgc tggaagtcgg cgattcggcg ttcggcgtgc cggcgcggtat ttccgccacg
 480
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 540
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 573

<210> 2272

<211> 191

<212> PRT

<213> Homo sapiens

<400> 2272

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Asp	Glu	Asp	Ile	Pro	Met	Val	Asp	Glu	Ser	Leu	Glu	Gln	Phe	Ala	Gln
			20					25					30		
Leu	Leu	Lys	Thr	Arg	Thr	Ser	Glu	Glu	Gly	Met	Ala	Pro	Leu	Thr	Ser
		35					40					45			
Asp	Ala	Val	Ala	Arg	Leu	Ala	Thr	Tyr	Ser	Ala	Arg	Leu	Ala	Asp	His
	50					55					60				
Gln	Gly	Arg	Val	Ser	Ala	Arg	Ile	Gly	Asp	Leu	Phe	Gln	Leu	Val	Ser
65					70					75				80	
Glu	Ala	Asp	Phe	Ile	Arg	His	Leu	Ala	Gly	Asp	Glu	Met	Thr	Asp	Ala
			85						90					95	
Gly	His	Ile	Glu	Arg	Ala	Leu	Lys	Ala	Lys	Ala	Thr	Arg	Thr	Gly	Arg
		100						105					110		
Val	Ser	Ala	Arg	Ile	Leu	Asp	Asp	Met	Leu	Ala	Gly	Val	Ile	Leu	Ile
		115					120					125			
Asp	Thr	Ala	Gly	Ala	Ala	Val	Gly	Lys	Cys	Asn	Gly	Leu	Thr	Val	Leu
	130					135						140			
Glu	Val	Gly	Asp	Ser	Ala	Phe	Gly	Val	Pro	Ala	Arg	Ile	Ser	Ala	Thr
145					150					155				160	
Val	Tyr	Pro	Gly	Gly	Ser	Gly	Ile	Val	Asp	Ile	Glu	Arg	Glu	Val	Asn
			165					170						175	
Leu	Gly	Gln	Pro	Ile	His	Ser	Lys	Gly	Val	Met	Ile	Leu	Thr	Gly	
		180						185						190	

<210> 2273

<211> 4355

<212> DNA

<213> Homo sapiens

<400> 2273

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 120
 gagaggagg aggaagtgat cacctgtttt gagaggcct cctggatcgc tcaggtgttc
 180
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 240
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 300

aacctgaaga aggggaacat cgtgaagggc atgagagagc tccgggaggt gctgcggact
360
gtggagacca aagcaactca gaacttcaaa gtgatggcgg ccaagcacct ggcggggggc
420
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480
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660
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720
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780
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<210> 2274

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2274

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Gln	Arg	Ser	Cys	Arg	Gly	Gly	Leu	Ser	Leu	Glu	Arg	Leu	Pro	Asn	Ser
			20				25						30		
Ile	Ala	Ser	Arg	Phe	Arg	Leu	Thr	Glu	Arg	Glu	Glu	Glu	Val	Ile	Thr
			35				40						45		
Cys	Phe	Glu	Arg	Ala	Ser	Trp	Ile	Ala	Gln	Val	Phe	Leu	Gln	Glu	Leu
			50				55					60			
Glu	Lys	Thr	Thr	Asn	Asn	Ser	Thr	Ser	Arg	His	Leu	Lys	Gly	Cys	His
65					70				75					80	
Pro	Leu	Asp	Tyr	Glu	Leu	Thr	Tyr	Phe	Leu	Glu	Ala	Ala	Leu	Gln	Ser
			85						90					95	
Ala	Tyr	Val	Lys	Asn	Leu	Lys	Lys	Gly	Asn	Ile	Val	Lys	Gly	Met	Arg
			100					105					110		
Glu	Leu	Arg	Glu	Val	Leu	Arg	Thr	Val	Glu	Thr	Lys	Ala	Thr	Gln	Asn
			115				120					125			
Phe	Lys	Val	Met	Ala	Ala	Lys	His	Leu	Ala	Gly	Val	Leu	Leu	His	Ser
			130				135					140			
Leu	Ser	Gly	Val	Leu	Leu	Glu	Pro	Pro	Val	Pro	Pro	Ser	Ala		

145

150

155

<210> 2275

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2275

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120
aaggagaaca ggagacctca aaaggaagaa ccaggctgtg cccaacacctt ttttccaaac
180
caaagtctctg gcttcactac acccactgct atgacacctc ctgttctaac cacagccgaa
240
acttcagtca agcccagtgt ctctgcattc actcattccc caccagaaaa cacaactggg
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360
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420
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480
ccattcttga gcagcagtgc tactctaata ccagttccca tctcccctcc ctttactcag
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608

<210> 2276

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2276

Ser	Thr	Asn	Asn	Thr	Lys	Glu	Asn	Arg	Arg	Pro	Gln	Lys	Glu	Glu	Pro
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Gly	Cys	Ala	Pro	Thr	Phe	Phe	Pro	Asn	Gln	Ser	Ser	Gly	Phe	Thr	Thr
			20					25					30		
Pro	Thr	Ala	Met	Thr	Pro	Pro	Val	Leu	Thr	Thr	Ala	Glu	Thr	Ser	Val
			35				40					45			
Lys	Pro	Ser	Val	Ser	Ala	Phe	Thr	His	Ser	Pro	Pro	Glu	Asn	Thr	Thr
			50				55				60				
Gly	Ile	Ser	Ser	Thr	Ile	Ser	Phe	His	Ser	Arg	Thr	Leu	Asn	Leu	Thr
					70					75				80	
Asp	Val	Ile	Glu	Glu	Leu	Ala	Gln	Ala	Ser	Thr	Gln	Thr	Leu	Lys	Ser
					85				90					95	
Thr	Ile	Ala	Ser	Glu	Thr	Thr	Leu	Ser	Ser	Lys	Ser	His	Gln	Ser	Thr
			100					105					110		
Thr	Thr	Arg	Lys	Ala	Ile	Ile	Arg	His	Ser	Thr	Ile	Pro	Pro	Phe	Leu
			115				120					125			
Ser	Ser	Ser	Ala	Thr	Leu	Ile	Pro	Val	Pro	Ile	Ser	Pro	Pro	Phe	Thr

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 Gln Arg Ala Val Thr Asp Asn Val Ala Thr Pro Ile Ser Gly Leu Met
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 Thr Asn Thr Val Val Lys Leu
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<210> 2277
 <211> 640
 <212> DNA
 <213> Homo sapiens

<400> 2277
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 gacagggaca ctgagggatg aaagccccca cgctctggcc tgccctgctc agtcagggcc
 180
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 420
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 480
 cccatggccc agcgtcccag tgtgctgccc acggcccagc ctgaccgacc cgggtgtgctg
 540
 cccgcggccc ggctgaccc agtgtgctgc tctgggaagg aagcctggtg ggaacagtgc
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 640

<210> 2278
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2278
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 Gly Arg Ser Ser Pro Gly Thr Ala Gln Pro Gly Pro Xaa Thr Lys Ser
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 Cys Cys Pro Pro Trp Leu Ser Ser Pro Pro Ala Ala Cys Leu Pro Ser
 35 40 45
 Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val
 50 55 60
 His Ala Thr Pro Gln Glu Glu Pro Gln Arg Leu Ser Ser Asp Pro Thr
 65 70 75 80
 Leu Ser Ala Pro Thr Leu Pro Pro His Gln Ile Leu Ser Thr Pro
 85 90 95

<210> 2279
 <211> 331
 <212> DNA
 <213> Homo sapiens

<400> 2279
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 120
 ttccggacca gggggatgca caggggcaa gagaatgcat ggaatcagag ggcactggcc
 180
 ccaactcctc cccatcatcg cctgcagtgt tgttttcatt cctgcactgt gcctttgttt
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 331

<210> 2280
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2280
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 20 25 30
 Glu Cys Met Glu Ser Glu Gly Thr Gly Pro Thr His Ser Pro Ser Ser
 35 40 45
 Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu
 50 55 60
 Gly Thr Ser Phe Thr Pro Ala Cys Ile Ser Ser Leu Ser His Gly Ser
 65 70 75 80
 Pro Leu Ser Trp Ser Ser Gly Ala Val Pro Ile
 85 90

<210> 2281
 <211> 409
 <212> DNA
 <213> Homo sapiens

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 120
 gatgacaaat tcaagcattg ccacagaaaa ttttctgtct gtcagttctc ccaccaact
 180
 gataatgaag ccaggctctg aatgggatgg ctctaccca agtgaggact cccgaggtac
 240
 ctttgtgcca gatattttac atggcaactt tcaagagggt ggcagctgg cctctgccgc
 300

gcctgacttg tggatagatg ctaagaagcc cttcagtttg aaagcagatg gtgagaatcc
360

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409

<210> 2282

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2282

Met	Thr	Asn	Ser	Ser	Ile	Ala	Thr	Glu	Asn	Phe	Pro	Ala	Val	Ser	Ser
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Pro	Thr	Gln	Leu	Ile	Met	Lys	Pro	Gly	Ser	Glu	Trp	Asp	Gly	Ser	Thr
			20					25					30		
Pro	Ser	Glu	Asp	Ser	Arg	Gly	Thr	Phe	Val	Pro	Asp	Ile	Leu	His	Gly
		35					40					45			
Asn	Phe	Gln	Glu	Gly	Gly	Gln	Leu	Ala	Ser	Ala	Ala	Pro	Asp	Leu	Trp
	50					55					60				
Ile	Asp	Ala	Lys	Lys	Pro	Phe	Ser	Leu	Lys	Ala	Asp	Gly	Glu	Asn	Pro
65					70				75					80	
Asp	Ile	Leu	Thr	His	Cys	Glu	His	Asp	Tyr	Gly	Glu	Thr	Thr	Thr	Arg
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<210> 2283

<211> 404

<212> DNA

<213> Homo sapiens

<400> 2283

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120
ccgacaattt ctagtaaatt ccgacgaaag tttattgtaa aatactctgc aacctctttt
180
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240
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300
cgacttccag ctaaagcgca ggcgtcccat gccacttctt ctccgaagat gcgtaaagtt
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404

<210> 2284

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2284

Met	Asp	Leu	Arg	Ser	Gln	Arg	Arg	Gln	Trp	Thr	Arg	Arg	Ala	Cys	Glu
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His	Leu	Leu	Val	Val	Phe	Phe	Leu	Val	Gly	Ala	Val	Pro	Thr	Ile	Ser

			20					25					30			
Ser	Lys	Phe	Arg	Arg	Lys	Phe	Ile	Val	Lys	Tyr	Ser	Ala	Thr	Ser	Phe	
		35					40					45				
Leu	Leu	Cys	His	Leu	Gly	Gly	Gly	Cys	Asn	Phe	Pro	His	His	Cys	Arg	
	50					55					60					
Val	Leu	Arg	Asn	Arg	Leu	Gln	Pro	Cys	His	Arg	Ser	Ser	Gln	Leu	His	
65					70					75					80	
Gln	Ala	Phe	Gly	Arg	Ala	Val	Ile	Arg	Leu	Pro	Ala	Lys	Ala	Gln	Ala	
			85						90					95		
Ser	His	Ala	Thr	Ser	Ser	Pro	Lys	Met	Arg	Lys	Val	Arg	Thr	Arg	Lys	
		100						105					110			
Gln	Gly	Ala	Val	Glu	Arg	Ser	Ser	Ala	Pro							
		115					120									

<210> 2285

<211> 6505

<212> DNA

<213> Homo sapiens

<400> 2285

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<210> 2286

<211> 1784

<212> PRT

<213> Homo sapiens

<400> 2286

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			20					25					30		
Pro	Gly	Pro	Ala	Pro	Gly	Arg	Ala	Thr	Glu	Gly	Arg	Ala	Ala	Leu	Asp
			35				40					45			
Ile	Val	His	Pro	Val	Arg	Val	Asp	Ala	Gly	Gly	Ser	Phe	Leu	Ser	Tyr
			50				55				60				
Glu	Leu	Trp	Pro	Arg	Ala	Leu	Arg	Lys	Arg	Asp	Val	Ser	Val	Arg	Arg
65				70					75					80	
Asp	Ala	Pro	Ala	Phe	Tyr	Glu	Leu	Gln	Tyr	Arg	Gly	Arg	Glu	Leu	Arg
				85					90					95	
Phe	Asn	Leu	Thr	Ala	Asn	Gln	His	Leu	Leu	Ala	Pro	Gly	Phe	Val	Ser
			100					105					110		
Glu	Thr	Arg	Arg	Arg	Gly	Gly	Leu	Gly	Arg	Ala	His	Ile	Arg	Ala	His
			115				120					125			
Thr	Pro	Ala	Cys	His	Leu	Leu	Gly	Glu	Val	Gln	Asp	Pro	Glu	Leu	Glu
			130				135				140				
Gly	Gly	Leu	Ala	Ala	Ile	Ser	Ala	Cys	Asp	Gly	Leu	Lys	Gly	Val	Phe
145				150					155					160	
Gln	Leu	Ser	Asn	Glu	Asp	Tyr	Phe	Ile	Glu	Pro	Leu	Asp	Ser	Ala	Pro
			165					170						175	
Ala	Arg	Pro	Gly	His	Ala	Gln	Pro	His	Val	Val	Tyr	Lys	Arg	Gln	Ala
			180				185						190		
Pro	Glu	Arg	Leu	Ala	Gln	Arg	Gly	Asp	Ser	Ser	Ala	Pro	Ser	Thr	Cys

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210	215	220
Ala Ala Ala Val Ala Ala	Ala Thr Ala Arg Arg Leu His Gln Arg Ser	
225	230	235
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245	250	255
Met Val Glu Tyr His Gly	Gln Pro Gln Val Glu Ser Tyr Val Leu Thr	
260	265	270
Ile Met Asn Met Val Ala	Gly Leu Phe His Asp Pro Ser Ile Gly Asn	
275	280	285
Pro Ile His Ile Thr Ile	Val Arg Leu Val Leu Leu Glu Asp Glu Glu	
290	295	300
Glu Asp Leu Lys Ile Thr	His His Ala Asp Asn Thr Leu Lys Ser Phe	
305	310	315
Cys Lys Trp Gln Lys Ser	Ile Asn Met Lys Gly Asp Ala His Pro Leu	
325	330	335
His His Asp Thr Ala Ile	Leu Leu Thr Arg Lys Asp Leu Cys Ala Ala	
340	345	350
Met Asn Arg Pro Cys Glu	Thr Leu Gly Leu Ser His Val Ala Gly Met	
355	360	365
Cys Gln Pro His Arg Ser	Cys Ser Ile Asn Glu Asp Thr Gly Leu Pro	
370	375	380
Leu Ala Phe Thr Val Ala	His Glu Leu Gly His Ser Phe Gly Ile Gln	
385	390	395
His Asp Gly Ser Gly Asn	Asp Cys Glu Pro Val Gly Lys Arg Pro Phe	
405	410	415
Ile Met Ser Pro Gln Leu	Leu Tyr Asp Ala Ala Pro Leu Thr Trp Ser	
420	425	430
Arg Cys Ser Arg Gln Tyr	Ile Thr Arg Phe Leu Asp Arg Gly Trp Gly	
435	440	445
Leu Cys Leu Asp Asp Pro	Pro Ala Lys Asp Ile Ile Asp Phe Pro Ser	
450	455	460
Val Pro Pro Gly Val Leu	Tyr Asp Val Ser His Gln Cys Arg Leu Gln	
465	470	475
Tyr Gly Ala Tyr Ser Ala	Phe Cys Glu Asp Met Asp Asn Val Cys His	
485	490	495
Thr Leu Trp Cys Ser Val	Gly Thr Thr Cys His Ser Lys Leu Asp Ala	
500	505	510
Ala Val Asp Gly Thr Arg	Cys Gly Glu Asn Lys Trp Cys Leu Ser Gly	
515	520	525
Glu Cys Val Pro Val Gly	Phe Arg Pro Glu Ala Val Asp Gly Gly Trp	
530	535	540
Ser Gly Trp Ser Ala Trp	Ser Ile Cys Ser Arg Ser Cys Gly Met Gly	
545	550	555
Val Gln Ser Ala Glu Arg	Gln Cys Thr Gln Pro Thr Pro Lys Tyr Lys	
565	570	575
Gly Arg Tyr Cys Val Gly	Glu Arg Lys Arg Phe Arg Leu Cys Asn Leu	
580	585	590
Gln Ala Cys Pro Ala Gly	Arg Pro Ser Phe Arg His Val Gln Cys Ser	
595	600	605
His Phe Asp Ala Met Leu	Tyr Lys Gly Gln Leu His Thr Trp Val Pro	
610	615	620
Val Val Asn Asp Val Asn	Pro Cys Glu Leu His Cys Arg Pro Ala Asn	

625 630 635 640
 Glu Tyr Phe Ala Lys Lys Leu Arg Asp Ala Val Val Asp Gly Thr Pro
 645 650 655
 Cys Tyr Gln Val Arg Ala Ser Arg Asp Leu Cys Ile Asn Gly Ile Cys
 660 665 670
 Lys Asn Val Gly Cys Asp Phe Glu Ile Asp Ser Gly Ala Met Glu Asp
 675 680 685
 Arg Cys Gly Val Cys His Gly Asn Gly Ser Thr Cys His Thr Val Ser
 690 695 700
 Gly Thr Phe Xaa Arg Arg Pro Arg Val Xaa Gly Tyr Val Asp Val Gly
 705 710 715 720
 Leu Ile Pro Ala Gly Ala Arg Glu Ile Arg Ile Gln Glu Val Ala Glu
 725 730 735
 Ala Ala Asn Phe Leu Ala Leu Arg Ser Glu Asp Pro Glu Lys Tyr Phe
 740 745 750
 Leu Asn Gly Gly Trp Thr Ile Gln Trp Asn Gly Asp Tyr Gln Val Ala
 755 760 765
 Gly Thr Thr Phe Thr Tyr Ala Arg Arg Gly Asn Trp Glu Asn Leu Thr
 770 775 780
 Ser Pro Gly Pro Thr Lys Glu Pro Val Trp Ile Gln Val Pro Ala Ser
 785 790 795 800
 Arg Gly Pro Gly Gly Gly Ser Arg Gly Gly Val Pro Arg Pro Ser Thr
 805 810 815
 Leu His Gly Arg Ser Arg Pro Gly Gly Val Ser Pro Gly Ser Val Thr
 820 825 830
 Glu Pro Gly Ser Glu Pro Gly Pro Pro Ala Ala Ala Ser Thr Ser Val
 835 840 845
 Ser Pro Ser Leu Lys Trp Pro Asn Leu Val Ala Ala Val His Arg Gly
 850 855 860
 Gly Trp Gly Gln Ala Pro Leu Gly Leu Gly Gly Trp Arg Arg His Leu
 865 870 875 880
 Val Leu Met Gly Pro Arg Leu Pro Thr Gln Leu Leu Phe Gln Glu Ser
 885 890 895
 Asn Pro Gly Val His Tyr Glu Tyr Thr Ile His Arg Glu Ala Gly Gly
 900 905 910
 His Asp Glu Val Pro Pro Pro Val Phe Ser Trp His Tyr Gly Pro Trp
 915 920 925
 Thr Lys Cys Thr Val Thr Cys Gly Arg Gly Val Gln Arg Gln Asn Val
 930 935 940
 Tyr Cys Leu Glu Arg Gln Ala Gly Pro Val Asp Glu Glu His Cys Asp
 945 950 955 960
 Pro Leu Gly Arg Pro Asp Asp Gln Gln Arg Lys Cys Ser Glu Gln Pro
 965 970 975
 Cys Pro Ala Arg Trp Trp Ala Gly Glu Trp Gln Leu Cys Ser Ser Ser
 980 985 990
 Cys Gly Pro Gly Gly Leu Ser Arg Arg Ala Val Leu Cys Ile Arg Ser
 995 1000 1005
 Val Gly Leu Asp Glu Gln Ser Ala Leu Glu Pro Pro Ala Cys Glu His
 1010 1015 1020
 Leu Pro Arg Pro Pro Thr Glu Thr Pro Cys Asn Arg His Val Pro Cys
 1025 1030 1035 1040
 Pro Ala Thr Trp Ala Val Gly Asn Trp Ser Gln Cys Ser Val Thr Cys
 1045 1050 1055
 Gly Glu Gly Thr Gln Arg Arg Asn Val Leu Cys Thr Asn Asp Thr Gly

1060	1065	1070
Val Pro Cys Asp Glu Ala Gln Gln Pro Ala Ser Glu Val Thr Cys Ser		
1075	1080	1085
Leu Pro Leu Cys Arg Trp Pro Leu Gly Thr Leu Gly Pro Glu Gly Ser		
1090	1095	1100
Gly Ser Gly Ser Ser Ser His Glu Leu Phe Asn Glu Ala Asp Phe Ile		
1105	1110	1115
Pro His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser Pro Lys Pro		
1125	1130	1135
Gly Thr Met Gly Asn Ala Ile Glu Glu Glu Ala Pro Glu Leu Asp Leu		
1140	1145	1150
Pro Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile		
1155	1160	1165
Asn Phe His Glu Asp Leu Ser Tyr Gly Pro Ser Glu Glu Pro Asp Leu		
1170	1175	1180
Asp Leu Ala Gly Thr Gly Asp Arg Thr Pro Pro Pro His Ser His Pro		
1185	1190	1195
Ala Ala Pro Ser Thr Gly Ser Pro Val Pro Ala Thr Glu Pro Pro Ala		
1205	1210	1215
Ala Lys Glu Glu Gly Val Leu Gly Pro Trp Ser Pro Ser Pro Trp Pro		
1220	1225	1230
Ser Gln Ala Gly Arg Ser Pro Pro Pro Ser Glu Gln Thr Pro Gly		
1235	1240	1245
Asn Pro Leu Ile Asn Phe Leu Pro Glu Glu Asp Thr Pro Ile Gly Ala		
1250	1255	1260
Pro Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp		
1265	1270	1275
Gly Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val		
1285	1290	1295
Gly Lys Asp Ser Gln Ser Gln Leu Pro Pro Pro Trp Arg Asp Arg Thr		
1300	1305	1310
Asn Glu Val Phe Lys Asp Asp Glu Glu Pro Lys Gly Arg Gly Ala Pro		
1315	1320	1325
His Leu Pro Pro Arg Pro Ser Ser Thr Leu Pro Pro Leu Ser Pro Val		
1330	1335	1340
Gly Ser Thr His Ser Ser Pro Ser Pro Asp Val Ala Glu Leu Trp Thr		
1345	1350	1355
Gly Gly Thr Val Ala Trp Glu Pro Ala Leu Glu Gly Gly Leu Gly Pro		
1365	1370	1375
Val Asp Ser Glu Leu Trp Pro Thr Val Gly Val Ala Ser Leu Leu Pro		
1380	1385	1390
Pro Pro Ile Ala Pro Leu Pro Glu Met Lys Val Arg Asp Ser Ser Leu		
1395	1400	1405
Glu Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp		
1410	1415	1420
Leu Gln Thr Val Ala Val Trp Gly Thr Phe Leu Pro Thr Thr Leu Thr		
1425	1430	1435
Gly Leu Gly His Met Pro Glu Pro Ala Leu Asn Pro Gly Pro Lys Gly		
1445	1450	1455
Gln Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu		
1460	1465	1470
Ser Thr Pro Ala Trp Asp Ser Pro Ala Asn Ser His Arg Val Pro Glu		
1475	1480	1485
Thr Gln Pro Leu Ala Pro Ser Leu Ala Glu Ala Gly Pro Pro Ala Asp		

1490 1495 1500
 Pro Leu Val Val Arg Asn Ala Ser Trp Gln Ala Gly Asn Trp Ser Glu
 1505 1510 1515 1520
 Cys Ser Thr Thr Cys Gly Leu Gly Ala Val Trp Arg Pro Val Arg Cys
 1525 1530 1535
 Ser Ser Gly Arg Asp Glu Asp Cys Ala Pro Ala Gly Arg Pro Gln Pro
 1540 1545 1550
 Ala Arg Arg Cys His Leu Arg Pro Cys Ala Thr Trp His Ser Gly Asn
 1555 1560 1565
 Trp Ser Lys Cys Ser Arg Ser Cys Gly Gly Gly Ser Ser Val Arg Asp
 1570 1575 1580
 Val Gln Cys Val Asp Thr Arg Asp Leu Arg Pro Leu Arg Pro Phe His
 1585 1590 1595 1600
 Cys Gln Pro Gly Pro Ala Lys Pro Pro Ala His Arg Pro Cys Gly Ala
 1605 1610 1615
 Gln Pro Cys Leu Ser Trp Tyr Thr Ser Ser Trp Arg Glu Cys Ser Glu
 1620 1625 1630
 Ala Cys Gly Gly Gly Glu Gln Gln Arg Leu Val Thr Cys Pro Glu Pro
 1635 1640 1645
 Gly Leu Cys Glu Glu Ala Leu Arg Pro Asn Thr Thr Arg Pro Cys Asn
 1650 1655 1660
 Thr His Pro Cys Thr Gln Trp Val Val Gly Pro Trp Gly Gln Cys Ser
 1665 1670 1675 1680
 Ala Pro Cys Gly Gly Gly Val Gln Arg Arg Leu Val Lys Cys Val Asn
 1685 1690 1695
 Thr Gln Thr Gly Leu Pro Glu Glu Asp Ser Asp Gln Cys Gly His Glu
 1700 1705 1710
 Ala Trp Pro Glu Ser Ser Arg Pro Cys Gly Thr Glu Asp Cys Glu Pro
 1715 1720 1725
 Val Glu Pro Pro Arg Cys Glu Arg Asp Arg Leu Ser Phe Gly Phe Cys
 1730 1735 1740
 Glu Thr Leu Arg Leu Leu Gly Arg Cys Gln Leu Pro Thr Ile Arg Thr
 1745 1750 1755 1760
 Gln Cys Cys Arg Ser Cys Ser Pro Pro Ser His Gly Ala Pro Ser Arg
 1765 1770 1775
 Gly His Gln Arg Val Ala Arg Arg
 1780

<210> 2287

<211> 750

<212> DNA

<213> Homo sapiens

<400> 2287

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 60
 tggcctataa aagtatcatc atccccattt tacagaatgg gaaagtaagg cgtggggagg
 120
 ttgaggacat ttgtacagag tcaggtaact ggaggaactg gactacaacc ctgctcagtg
 180
 cagccagtgt gactgagcgc ctctgagag ccagggtggat tctgcctca aggatccatg
 240
 ctctgggcaa gaaaccaccc catcagcagg tggcttctgc tgagccacaa caggcacaca
 300

gaggggtcca tgggagccca gaggggagca tctgaccagg ctcaggggaa ggaatgtgtc
 360
 cagcagagtc acagaggagc agtatgagtt agccaggtag gggacattcc aggcagggga
 420
 gcagcaggac aaaagcatag aggtagcact gccagtgccca agttccaaaa taagaggctg
 480
 actgctacag ggtccatata ggaaaataat gggaaataca tttggacagg aggtggggtc
 540
 tgtaacaaag gactttaatt ccaggttaag gaatctggat gttaaaacaa cattagctgc
 600
 catttctaca gtgctacttc ccaggctctg tgcctttctg ggagccttga aggtttgtga
 660
 gctggaagga gatattagga acaaaacgat gcatgaggat agctcaggta aaggttattg
 720
 ataagtaaga atgcctggca ccaaacgcgt
 750

<210> 2288

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2288

Met	Ala	Ala	Asn	Val	Val	Leu	Thr	Ser	Arg	Phe	Leu	Asn	Leu	Glu	Leu
1			5						10					15	
Lys	Ser	Phe	Val	Thr	Asp	Pro	Thr	Ser	Cys	Pro	Asn	Val	Phe	Pro	Ile
			20					25					30		
Ile	Phe	Leu	Tyr	Gly	Pro	Cys	Ser	Ser	Gln	Pro	Leu	Ile	Leu	Glu	Leu
		35				40						45			
Gly	Thr	Gly	Ser	Ala	Thr	Ser	Met	Leu	Leu	Ser	Cys	Cys	Ser	Pro	Ala
		50				55					60				
Trp	Asn	Val	Pro	Tyr	Leu	Ala	Asn	Ser	Tyr	Cys	Ser	Ser	Val	Thr	Leu
65					70					75				80	
Leu	Asp	Thr	Phe	Leu	Pro	Leu	Ser	Leu	Val	Arg	Cys	Ser	Pro	Leu	Gly
			85						90					95	
Ser	His	Gly	Pro	Leu	Cys	Val	Pro	Val	Val	Ala	Gln	Gln	Lys	Pro	Pro
			100					105					110		
Ala	Asp	Gly	Trp	Val	Ser	Cys	Pro	Glu	His	Gly	Ser	Leu	Arg	Ala	Glu
		115					120					125			
Ser	Thr	Trp	Leu	Ser	Gly	Gly	Ala	Gln	Ser	His	Trp	Leu	His		
		130				135						140			

<210> 2289

<211> 381

<212> DNA

<213> Homo sapiens

<400> 2289

caggacgcgg cctcggcggg gcccgggccg aacggctgcg gacacctggg cgccgaggag
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 ccgagcgccg ccgcctccgg catggatcat tgcgtgacgg tggagcgcg gctggagaag
 120
 gtgctgcaca agttctcggg ctacgggcag ctgtgcgagc gcggcctgga ggagctcatc
 180

gactacaccg gcggtctcaa gcaccagatc ctgcagagcc acggccaaga tgctgaatta
 240
 tcagggacac tttcacttgt tttgacacag ggetgtaaaa gaataanaag gggatactgg
 300
 ttcaaaaatt ggctccgac cacaagaca tccacagcag tgtttctcgg gttggaaaaa
 360
 ccattgatga ggattcactt t
 381

<210> 2290

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2290

Met	Asp	His	Cys	Val	Thr	Val	Glu	Arg	Glu	Leu	Glu	Lys	Val	Leu	His
1			5					10					15		
Lys	Phe	Ser	Gly	Tyr	Gly	Gln	Leu	Cys	Glu	Arg	Gly	Leu	Glu	Glu	Leu
		20					25					30			
Ile	Asp	Tyr	Thr	Gly	Gly	Leu	Lys	His	Gln	Ile	Leu	Gln	Ser	His	Gly
		35				40					45				
Gln	Asp	Ala	Glu	Leu	Ser	Gly	Thr	Leu	Ser	Leu	Val	Leu	Thr	Gln	Gly
	50				55					60					
Cys	Lys	Arg	Ile	Xaa	Arg	Gly	Tyr	Trp	Phe	Lys	Asn	Trp	Pro	Pro	Thr
65			70					75						80	
Thr	Lys	Thr	Ser	Thr	Ala	Val	Phe	Leu	Gly	Leu	Glu	Lys	Pro	Leu	Met
			85					90						95	
Arg	Ile	His	Phe												
			100												

<210> 2291

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2291

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 60
 ttccgcagca ccgactcatt atcggcaccg acctagtcaa ttgccaccac ctgcttatgc
 120
 aagtggctga tagaagcccc agccggctta agccagttct ggaaaaccac cacatatcgc
 180
 acatgttcgt tgtgacgatg cagctgagcc attgaatcga cggtcagcgc catgaacgcc
 240
 cgatgctcgt tgacggtaag actcgccgac ccagcaacgt cggcggttgt cgtgccctca
 300
 tcggtgtaat ggcgacgagc gacgatgacg tcatgtccgc cggcaaagaa ggctgcggaa
 360
 gcctcgcgta attcttgggg accgaggtcc tcggcgcgcc ggtctgaccc caccgccttg
 420
 aacttggcgt taaggaccga cctcacgtga gcctcccctg acgggttaga caggtattcc
 480
 tcctgccagt cccgcgctgc ccgaggcaag ctcaccccc agttgagctg ccaataccgc
 540

cacgacagga tctcgaaaag attggggacg cgt
573

<210> 2292

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2292

Met Ser Leu Pro Arg Ala Ala Arg Asp Trp Gln Glu Glu Tyr Leu Ser
1 5 10 15
Asn Pro Ser Gly Glu Ala His Val Arg Ser Val Leu Asn Ala Lys Phe
20 25 30
Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu
35 40 45
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile
50 55 60
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val
65 70 75 80
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala
85 90 95
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val
100 105 110
Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser
115 120 125
Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp
130 135 140

<210> 2293

<211> 358

<212> DNA

<213> Homo sapiens

<400> 2293

acgcgtgaag gaatggaagc tgctctcgtc ggtgcacaca agactggcgg gtgcccattg
60
gtgaacactg tcgctaagaa ctggttgaac cggctcaaca cgccggatat gaaacccact
120
gaggagatca agcggcagtt ccaaggtctg cattgggttg gacgtaagta tgggctcaac
180
cacggagagt tctatcttga cgacgagcag tgggccacgc tcatggcggg gtctcttttc
240
gaggcgaatc cgcgcatata gagcaacttt gattccgagg gcgctgttgt ggatccggat
300
tccgattcac ttgctggggc tgatcgagat gcccgagggtg ctteggatgc atgccttc
358

<210> 2294

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2294

Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu

1	5	10	15
Val Asn Thr	Val Ala Lys Asn Trp	Leu Asn Arg	Leu Asn Thr Pro Asp
20	25	30	
Met Lys Pro Thr	Glu Glu Ile Lys Arg Gln Phe	Gln Gly Leu His Trp	
35	40	45	
Leu Gly Arg Lys Tyr Gly	Leu Asn His Gly Glu Phe Tyr	Leu Asp Asp	
50	55	60	
Glu Gln Trp Ala Thr	Leu Met Ala Gly Ser Ser Phe Glu Ala	Asn Pro	
65	70	75	80
Arg Ile Lys Ser Asn Phe Asp Ser	Glu Gly Ala Val Val Asp	Pro Asp	
85	90	95	
Ser Asp Ser Leu Ala Gly Ala Asp	Arg Asp Ala Arg Gly Ala Ser Asp		
100	105	110	
Ala Cys Leu			
115			

<210> 2295

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2295

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120
tcggtgtatc gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttcagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatact ggaagcggc
240
gcgagcgcc tcaaacatta tcgcgttaaa aacgtggtac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg ccggaggcgg cggcgtgct ggtgcgctc
420
catgcccgta ccgagcacga gatgaaagag caggggcgcg cacttctggc gcttggtgc
480
gaggcagtgc tgatgaaagg cggccatctt gacgatcctg agagcccga ctggtcttc
540
acgcgt
546

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<210> 2296

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2296

Gly Thr Asp	Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp	Leu Xaa Thr
1	5	10
Phe Ser Ala	Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala	Leu Val
20	25	30
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu	Pro Asp	

35 40 45
 Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
 50 55 60
 Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
 65 70 75 80
 Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
 85 90 95
 Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
 100 105 110
 Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
 115 120 125
 Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
 130 135 140
 Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
 145 150 155 160
 Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
 165 170 175
 Asp Trp Leu Phe Thr Arg
 180

<210> 2297

<211> 414

<212> DNA

<213> Homo sapiens

<400> 2297

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 gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac cccccccccc
 120
 cccccccca aaggccgaaa agcagggcca aaaccccccg gacccccccc ggggggggga
 180
 aaaggaaaaa cccctttttt tttttttttt ttttatacac atgaggggtct ctgggttaata
 240
 aatgttgaga tgtaggggta ggtgagatta aacaggttct ttttttcattg atttctcgga
 300
 gtctttatga tgctccacac cagtacttct caaagctgac tgtgtataca aaacactggg
 360
 gatctgaccc acatgtaaag tctgatttct ttggtctggg gcaggcctga aatn
 414

<210> 2298

<211> 67

<212> PRT

<213> Homo sapiens

<400> 2298

Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
 1 5 10 15
 Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
 20 25 30
 Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
 35 40 45
 Phe Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

50
Val Glu Met
65

55

60

<210> 2299
<211> 987
<212> DNA
<213> Homo sapiens

<400> 2299
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60
ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg taccctgcga ctcgtgacca
120
acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac
180
agtttggata tgactgaggc tctccaatgg gccagatata actggcgacg gctgatcaga
240
ggtgcaacca gggatgatga ttcagggccca tacaactatt cctcgttgct cgctgtggg
300
cgcaagtcct ctcagatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc
360
cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga
420
acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga
480
gctgccaat tatatttctt gttcctagtt gtctgaact gggtaccttt ggtagaagcc
540
ttccaaaagg aaatcaccat gttgcctctg gtggtgggtc ttacaattat cgcaattaa
600
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa ttaataact
660
aaagtttata gtaggaaaga gaaaaaatac attgaccgat gctggaaaga cgttactgtt
720
ggggacttta ttgcctctc ctgcaacgag gtcacccctg cagacatggg actactcttt
780
tccactgac cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat
840
ttaaacaga ggcaggtggt tcggggatat gcagaacagg actctgaagt tgatcctgag
900
aagttttcca gtaggataga atgtgaaagc ccaaacaatg acctcagcag attccgaggc
960
ttctagaac attccaacaa agaacgc
987

<210> 2300
<211> 266
<212> PRT
<213> Homo sapiens

<400> 2300
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile
1 5 10 15
Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser

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<210> 2301
<211> 390
<212> DNA
<213> Homo sapiens
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<210> 2302

<211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2302
 Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser
 1 5 10 15
 Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys
 20 25 30
 Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr
 35 40 45
 Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn
 50 55 60
 Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg
 65 70 75 80
 Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu
 85 90 95
 Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val
 100 105 110
 Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro
 115 120 125
 Gly Arg
 130

<210> 2303
 <211> 638
 <212> DNA
 <213> Homo sapiens

<400> 2303
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 gcacctgtgt ttggctacct gggcgaccga catagccgca aggctaccat gagcttcggt
 120
 atcttctgtt ggtcaggagc tggcctctct agctccttca tctcccccg gtattcttgg
 180
 ctcttcttcc tgtcccgagg catcgagggc actggctcgg ccagctactc caccatcgcg
 240
 cccaccgtcc tggcgacact cttcgtgagg gaccagcgca cccgcgtgct ggctgtcttc
 300
 tacatcttta tccccgttgg aagtggctct ggctacgtgc tggggctcggc tgtgacgatg
 360
 ctgactggga actggcgctg ggcctccga gtcatgcctt gcctggaggc cgtggccttg
 420
 atcctgetta tcttctggtt tccagacca ccccgaggag ctgccgagac acagggggag
 480
 ggggccgtgg gaggttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac
 540
 tggagttttg tgtggtcgac cctcggagtg accgccatgg cctttgtgac tggagcctg
 600
 gggttctggg cccccaagtt tctgctcgag gcacgcgt
 638

<210> 2304

<211> 212

<212> PRT

<213> Homo sapiens

<400> 2304

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Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys
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Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser
      20           25           30
Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly
      35           40           45
Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu
      50           55           60
Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala
      65           70           75           80
Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val
      85           90           95
Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr
      100          105          110
Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala
      115          120          125
Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile
      130          135          140
Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu
      145          150          155          160
Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr
      165          170          175
Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala
      180          185          190
Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu
      195          200          205
Leu Glu Ala Arg
      210

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<210> 2305

<211> 340

<212> DNA

<213> Homo sapiens

<400> 2305

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gccccgcgct ctatcttccg gcacgtcac agtcgcatcg tgacggtact ggctggagtc
 60
tcggaccagc acactttgac cgctcgtggtc gcctcgtgac atggggtaac gcgaacctcg
 120
tcgctcctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg
 180
cccgaacgc tattggtgac gcagcactcg cagctggtct cgaccgactc gtccacacca
 240
cggcgtcggg gcgcgacgag ggcatgagt tggcgtcgt tactcgcagc gctgctgccg
 300
ccgcacgcaa ttccatgacg acaacgtgga gttggcgcgc
 340

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<210> 2306

<211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2306
 Met Glu Leu Arg Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn
 1 5 10 15
 Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser
 20 25 30
 Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu
 35 40 45
 Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly
 50 55 60
 Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser
 65 70 75 80
 Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys
 85 90 95
 Asp Asp Ala Gly Arg
 100

<210> 2307
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 2307
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 gccaaaggcac tgggtggggc tggcagtggg agcaagggct cagcaggtgg cggaagcaag
 120
 cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat
 180
 gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct
 240
 ccacctgtc ctctccacgg tggctccoga ggccttcca ctttccttcc tgagccccc
 300
 gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaac caaagaggca
 360

<210> 2308
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2308
 Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro
 1 5 10 15
 Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys
 20 25 30
 Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser
 35 40 45
 Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu
 50 55 60
 Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro

65		70		75		80									
Pro	Pro	Cys	Pro	Leu	His	Gly	Gly	Ser	Arg	Gly	Pro	Ser	Thr	Phe	Leu
				85				90						95	
Pro	Glu	Pro	Pro	Asp	Thr	Tyr	Glu	Glu	Asp	Gly	Asp	Glu	Ser	Gly	Asn
			100					105					110		
Gly	Leu	Pro	Lys	Thr	Lys	Glu	Ala								
		115					120								

<210> 2309

<211> 395

<212> DNA

<213> Homo sapiens

<400> 2309

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cactctctgc cctggggccgc ggggcctgac tgggttccca cctcctccta cccactgggg
120
tcttttccag caggcacagg gattcctcat gggggaggca gagcccaccc gtctgtcctc
180
ggtgacggcc tgagctgtgc acggcctccc ctgccctcct gttctcaggc cccccagggt
240
ccatccagcc ccagcgtgtg gcgttctggc tcttccttgg agtctcctcc cagaccacgc
300
gactccactc aactgtgcc tagcggactg tgtggtgat gcagccggct cacttgagtg
360
tggtgtgtta tgcccacaac aggcttgccg tcacc
395

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<210> 2310

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2310

Met	Gly	Pro	Cys	Ser	Glu	His	Ile	Pro	Met	Arg	Ala	Ala	Cys	Pro	Val
1			5					10					15		
His	Ser	Leu	Pro	Trp	Ala	Ala	Gly	Pro	Asp	Trp	Val	Pro	Thr	Ser	Ser
		20					25					30			
Tyr	Pro	Leu	Gly	Ser	Phe	Pro	Ala	Gly	Thr	Gly	Ile	Pro	His	Gly	Gly
		35				40				45					
Gly	Arg	Ala	His	Pro	Ser	Val	Leu	Gly	Asp	Gly	Leu	Ser	Cys	Ala	Arg
	50				55			60							
Pro	Pro	Leu	Pro	Ser	Cys	Ser	Gln	Ala	Pro	Gln	Gly	Pro	Ser	Ser	Pro
65				70				75				80			
Ser	Val	Trp	Arg	Ser	Gly	Ser	Ser	Leu	Glu	Ser	Pro	Pro	Arg	Pro	Arg
		85					90					95			
Asp	Ser	Thr	His	Thr	Val	Pro	Ser	Gly	Leu	Cys	Gly				
		100					105								

<210> 2311

<211> 378

<212> DNA

<213> Homo sapiens

<400> 2311

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ggcttctcag tgatcaaggt cggcgatggc atcaatgatt gcgacgctct cgccgcggcg
120
gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc
180
gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg
240
gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcgggtgtt ccttgtaacg
300
accgtcgtcg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag
360
cttgtgacca tgaacgcg
378

<210> 2312

<211> 126

<212> PRT

<213> Homo sapiens

<400> 2312

Val	His	Ala	Glu	Met	Leu	Pro	Gln	Asp	Lys	Gln	Arg	Val	Val	Gly	Glu
1				5					10					15	
Leu	Lys	Arg	Gln	Gly	Phe	Ser	Val	Ile	Lys	Val	Gly	Asp	Gly	Ile	Asn
			20					25					30		
Asp	Cys	Asp	Ala	Leu	Ala	Ala	Ala	Asp	Val	Gly	Ser	Pro	Met	Gly	Gly
		35				40					45				
Ser	Ala	Asp	Val	Ala	Leu	Glu	Thr	Ala	Asp	Ala	Ala	Val	Leu	His	Gly
	50				55						60				
Arg	Val	Gly	Asp	Val	Phe	Ala	Met	Ile	Ala	Leu	Ser	Lys	Arg	Thr	Met
65				70					75					80	
Ala	Asn	Ile	Arg	Gln	Asn	Ile	Ala	Ile	Ala	Ile	Gly	Leu	Lys	Ala	Val
			85				90							95	
Phe	Leu	Val	Thr	Thr	Val	Val	Gly	Ile	Thr	Gly	Leu	Trp	Pro	Ala	Ile
		100					105						110		
Leu	Ala	Asp	Thr	Gly	Thr	Thr	Glu	Leu	Val	Thr	Met	Asn	Ala		
		115					120					125			

<210> 2313

<211> 669

<212> DNA

<213> Homo sapiens

<400> 2313

ctagtggcat ggtctcgctg gtctttagtg gagcataccg acacatcggg gactcaaacg
60
atccgaatca tggctcgctc tggttggcct ggaaccatta acgtacgect caccatcgc
120
ttaagcgacg ccggtctagc tgctgaagtc accgcgcgca atgtcggtag gacagcgggg
180
ccgcttggat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca
240

gtcgacgccc cgtttacctc gtggttacag gtcgatgac ggctgctacc aatgcagatg
 300
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat
 360
 accgcttaca ccgtgaaagg aggacggaac cgtcggatcg cccgcatggc gtatccgggt
 420
 ctcaacggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc
 480
 tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgagg cccagatgca
 540
 tttaatgagg gcccgaccca cggtagcgtc attcgactgg agcccggtaa tgacgtcaca
 600
 ctgcactggg gcatcgccca acccgcgga gctcgaaagg acaaggacgg gaaggcagga
 660
 ttcacgcgt
 669

<210> 2314

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2314

Leu	Val	Ala	Trp	Ser	Arg	Trp	Ser	Leu	Val	Glu	His	Thr	Asp	Thr	Ser
1				5					10					15	
Val	Thr	Gln	Thr	Ile	Arg	Ile	Met	Ala	Arg	Pro	Gly	Trp	Pro	Gly	Thr
		20					25						30		
Ile	Asn	Val	Arg	Leu	Thr	His	Arg	Leu	Ser	Asp	Ala	Gly	Leu	Ala	Val
		35					40						45		
Glu	Val	Thr	Ala	Arg	Asn	Val	Gly	Thr	Thr	Ala	Gly	Pro	Leu	Gly	Tyr
	50					55					60				
Ala	Ala	His	Pro	Tyr	Leu	Cys	Leu	Gly	Gly	Thr	Ile	Asp	Asp	Trp	Thr
65					70					75				80	
Val	Asp	Ala	Pro	Phe	Thr	Ser	Trp	Leu	Gln	Val	Asp	Asp	Arg	Leu	Leu
				85					90					95	
Pro	Met	Gln	Met	Arg	Glu	Met	Asp	Ser	Ile	His	Ala	Leu	Asn	Gly	Leu
			100				105						110		
Thr	Gly	Gly	Gln	Arg	Thr	Phe	Asp	Thr	Ala	Tyr	Thr	Val	Lys	Gly	Gly
		115					120						125		
Arg	Asn	Arg	Arg	Ile	Ala	Arg	Met	Ala	Tyr	Pro	Gly	Leu	Asn	Gly	Glu
	130					135						140			
Thr	Ser	His	Glu	Leu	Trp	Gly	Asp	Ala	Ala	Met	Ser	Trp	Val	Gln	Val
145					150					155				160	
Tyr	Thr	Pro	Asp	Asp	Arg	His	Ser	Leu	Ala	Ile	Glu	Pro	Met	Thr	Cys
			165						170					175	
Gly	Pro	Asp	Ala	Phe	Asn	Glu	Gly	Pro	Thr	His	Gly	Asp	Val	Ile	Arg
		180					185						190		
Leu	Glu	Pro	Gly	Asn	Asp	Val	Thr	Leu	His	Trp	Gly	Ile	Ala		
		195					200						205		

<210> 2315

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2315

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 acccaaggcc gaccaattcg catcgataag gcggtcgctt atcacacttc tcgcggcggtg
 120
 ccggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg
 180
 cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat
 240
 gttgaggctg agggtgcccc gaccggattt cagcaggctg tcagggtggaa ccttttccag
 300
 attgctcagg catcagcccc tgcagatcaa cttggcattc cggcaaaggg tgtaaccggg
 360
 tcaggctatg aaggccacta cttttgggac actgagggtt atgtcatccc gatgttgacc
 420
 tacactcatc caagaatcgc tgagaatgcg ctgagattcc ggggtgaatac ccttccgcaa
 480
 gctcgacgcc gggctaagga attgtctgaa cgaggcgccc ttttcccgtg gcgaacaatc
 540
 accggt
 546

<210> 2316

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2316

Xaa	Ala	Ser	Leu	Ile	Asp	Thr	Glu	Pro	Gly	Met	Gly	Lys	Arg	Val	Tyr
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Arg	Val	Glu	Ala	Thr	Gln	Gly	Arg	Pro	Ile	Arg	Ile	Asp	Lys	Ala	Val
		20						25					30		
Ala	Tyr	His	Thr	Ser	Arg	Gly	Val	Pro	Val	His	Glu	Leu	Phe	Asp	Arg
		35					40					45			
Val	Arg	Arg	Ser	Leu	Asp	Arg	Val	Arg	Glu	Gln	Gly	His	Asn	Val	Tyr
	50					55					60				
Tyr	Asp	Glu	Gln	Arg	Ala	Trp	Leu	Asp	Asp	Tyr	Trp	Ala	Thr	Ala	Asp
65				70					75					80	
Val	Glu	Val	Glu	Gly	Ala	Pro	Thr	Gly	Ile	Gln	Gln	Ala	Val	Arg	Trp
			85					90						95	
Asn	Leu	Phe	Gln	Ile	Ala	Gln	Ala	Ser	Ala	Arg	Ala	Asp	Gln	Leu	Gly
			100					105					110		
Ile	Pro	Ala	Lys	Gly	Val	Thr	Gly	Ser	Gly	Tyr	Glu	Gly	His	Tyr	Phe
		115					120					125			
Trp	Asp	Thr	Glu	Val	Tyr	Val	Ile	Pro	Met	Leu	Thr	Tyr	Thr	His	Pro
	130					135					140				
Arg	Ile	Ala	Glu	Asn	Ala	Leu	Arg	Phe	Arg	Val	Asn	Thr	Leu	Pro	Gln
				150						155				160	
Ala	Arg	Arg	Arg	Ala	Lys	Glu	Leu	Ser	Glu	Arg	Gly	Ala	Leu	Phe	Pro
				165					170					175	
Trp	Arg	Thr	Ile	Thr	Gly										
				180											

<210> 2317

<211> 496

<212> DNA

<213> Homo sapiens

<400> 2317

gccggcgggc tcgggaacgg tcaactgacct gcagcaggca atggcggtcg cggtttaatc
 60
 agggttctgc acggagtttt ggatagtcgg tccagtcgcc actggcaagg cgcgaccagg
 120
 cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcattctgcc
 180
 gggtcagttc gatcagcgcg gtcgttcgag cgtttctga acgcagcccc tgetggcgca
 240
 gacgtcggct gagtgggcct ggtgtgagat gcaaccccgg attcctgccca ggaaagagcc
 300
 atccctcggg tcggtgtctc gatgtgtcag cgagctcggc gatcgcatte ccgaggacct
 360
 cgggcagttc gattggctcg gctccgatgg tgagcttccc cggctcgtgat gtcacgtcga
 420
 cctgctcacc ggtgagcgcg acgatgcgag tgaggtggag gccgtagagg agcacgagca
 480
 acccagcggc acgcgt
 496

<210> 2318

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2318

Met	Pro	Arg	Arg	Ser	Glu	Thr	Ile	Arg	Gly	Cys	Ile	Cys	Arg	Val	Ser
1				5					10					15	
Ser	Ile	Ser	Ala	Val	Val	Arg	Ala	Leu	Pro	Glu	Arg	Ser	Pro	Cys	Trp
			20					25					30		
Arg	Arg	Arg	Arg	Leu	Ser	Gly	Pro	Gly	Val	Arg	Cys	Asn	Pro	Gly	Phe
			35				40					45			
Leu	Pro	Gly	Lys	Ser	His	Pro	Ser	Gly	Arg	Cys	Leu	Asp	Val	Ser	Ala
			50				55				60				
Ser	Ser	Ala	Ile	Ala	Phe	Pro	Arg	Thr	Ser	Gly	Ser	Ser	Ile	Gly	Ser
			65			70				75				80	
Ala	Pro	Met	Val	Ser	Phe	Pro	Gly	Arg	Asp	Val	Thr	Ser	Thr	Cys	Ser
				85				90						95	
Arg	Val	Ser	Ala	Thr	Met	Arg	Val	Arg	Trp	Arg	Pro				
			100					105							

<210> 2319

<211> 1748

<212> DNA

<213> Homo sapiens

<400> 2319

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 60

gaatatactc aattccaaaa ttatgtgaaa gaattgaaga aaaaacggaa gcagaaaact
120
tttatagtga aaccagctaa tgggtgcaatg ggtcatggga tttctttgat aagaaatggt
180
gacaaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta
240
atggaagggtt acaagtttga cttacgaatt tatattctgg ttacatcgtg tgatccacta
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360
aatgagtcca atttgacceca gttatacatg catctgacaa actactccgt gaacaagcat
420
aatgagcatt ttgaacggga tgaaactgag aacaaaggca gcaaacgttc catcaaatgg
480
tttacagaat tccttcaagc aaatcaacat gatgttgcta agttttggag tgatatttca
540
gaattggtgg taaagaccct gattgtagca gaacctcatg tctgcatgc ctatcgaatg
600
tgtagacctg gtcaacctcc aggaagcgaa agtgtctgct ttgaagtcct gggatttgat
660
atthttgttg atagaaaact aaagccatgg cttctggaga ttaaccgagc cccaagcttt
720
ggaactgatc agaaaataga ctatgatgta aaaaggggag tgctgctaaa tgcgttgaag
780
ctactaaaca taaggaccag tgacaaaaga agaaacttgg ccaaacaaaa agctgaggct
840
caaaggagggc tctatggtca aaattcaatt aaaaggtctt taccaggctc ctcagactgg
900
gaacagcaga gacaccagtt ggagaggcgg aaagaagagt tgaaagagag actcgtctca
960
gtacgaaagc agatctcacg agaagaacat gaaaatcgac atatggggaa ttatagacga
1020
atthtaccct ctgaagataa agcattactt gaaaagtatg aaaatttggt agctgttgcc
1080
tttcagacct tcctttcagg aagagcagct tcattccagc gagagttgaa taatcctttg
1140
aaaaggatga aggaagaaga tattttggat cttctggagc aatgtgaaat tgatgatgaa
1200
aagttgatgg gaaaaactac caagactcga ggaccaaagc ctctgtgttc tatgcttgag
1260
agtactgaga taatgaaaag accaaagtac tgcagcagtg acagcagtta tgatagttag
1320
agcagctctt cagaatctga cgaaaatgaa aaagaagagt accaaaataa gaaaagagaa
1380
aagcaagtta catataatct taaacctcc aaccactaca aattaattca acaaccagc
1440
tcataagac gttcagtcag ctgccctcgg tccatctctg ctcaatcacc ttccagtggg
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cggtcacatt ccttaaaccg gggccttctt cctacatgag gcatctgcct cacagtaagt
1620
atgctgtctt taccaactct caagtgagtg agtctttgag gcaactgaaa acaaagaac
1680

aagaagatga tctaacaagt cagaccttat ttgttctcaa agacatgaag atccgggttc
1740

caggaaag

1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

Xaa	Ile	Lys	Ser	Arg	Ser	Leu	Asp	Tyr	Thr	Phe	Val	Pro	Arg	Thr	Trp
1			5						10					15	
Ile	Phe	Pro	Ala	Glu	Tyr	Thr	Gln	Phe	Gln	Asn	Tyr	Val	Lys	Glu	Leu
		20					25					30			
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
		35				40					45				
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
50						55					60				
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65				70					75					80	
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
			85					90					95		
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100						105				110			
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
	115					120					125				
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
130					135						140				
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145				150				155					160		
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
			165					170					175		
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
		180						185				190			
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
	195					200					205				
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
210				215							220				
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225			230					235					240		
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
			245					250					255		
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
	260					265						270			
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
	275					280					285				
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
290						295					300				
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305				310						315				320	
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
			325					330					335		
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

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      340      345      350
Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
      355      360      365
Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
      370      375      380
Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
385      390      395      400
Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
      405      410      415
Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
      420      425      430
Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Glu Ser Asp Glu
      435      440      445
Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
      450      455      460
Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
465      470      475      480
Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
      485      490      495
Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
      500      505      510
Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
      515      520      525
Leu Pro Pro Thr
      530

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<210> 2321

<211> 433

<212> DNA

<213> Homo sapiens

<400> 2321

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cgttctagaa atacagccac ataatttttt ttgttttgaa aaactgctca gcaaatgcat
120
acaggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa
180
agtccaggac accatcacag agcagtactt cccttgtag atactctcag ctaagtaaga
240
attgagtgag acaacaataa aacaaatacc cataggcttt tcaaacagta acaaccgct
300
cagggttagc agcatttcta gaccttgatg gtaaaatgat gttctcaacc ttgctttca
360
gacactggat cactgcttaa gtagccttta tcttttcccc ctaatttttg ttgaagatgc
420
cagaggtgga gtg
433

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<210> 2322

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2322

Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
 1 5 10 15
 Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
 20 25 30
 Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
 35 40 45
 Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
 50 55 60
 Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
 65 70 75 80
 Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
 85 90 95
 Thr His Ile Asp Thr Ser Thr Gln Leu
 100 105

<210> 2323

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2323

acgcgtcaaa actggcaaa ctggcggctt agggggaggg gcaagtggac ttggaggccc
 60
 tctccactg tgcacccct tggaaaaaa gcggaggggg catcaagtaa aagtttcttg
 120
 ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggttgcttct
 180
 ctgccgggca cagcgncttc caggagccag ccggggagag ctgagccaag gccgaaggag
 240
 ccgcctgcgg gcttagccgc cccctccgc ccgttgccc cagagcggac gctgggacgc
 300
 ccggggtctg gcagctctgc gcccggtag gagcgggcgg gcgagcatta gctgcgtcc
 360
 tggagaaggg gcgcagcgc gcagttgagg ccgaagcagc ccctcgcggg cgtaggatac
 420
 ctgtcagtga gcgccggat tgcacggccc ccgggtagt cctgccggcg aggggcggga
 480
 gctcgggtga cttggccatc cccatcccc gccagggccc ggagggcggc cg
 532

<210> 2324

<211> 51

<212> PRT

<213> Homo sapiens

<400> 2324

Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1 5 10 15
 Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
 20 25 30
 Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
 35 40 45
 Pro Arg Thr

50

<210> 2325

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2325

nnacgcgtgc aggaccgcat gagcgccatc tgggagagag gagggttgagg aggaagatg
 60
 gatgagaacc gttttgtggc cgttaccagt tccaacgcag ctaagcttct gaacctgtat
 120
 ccccgcaagg gccgcattat tcccgagacc gatgctgatg tgggtggtgagg ggaccacagaa
 180
 gccacaaaga ccattctcagc cagcacgcag gtccagggag gagacttcaa cctgtatgag
 240
 aacatgcgct gccacggcgt gccactggtc accatcagcc gggggcgcggt cgtgtatgag
 300
 aacggcgtct tcatgtgcgc cgagggcacc ggcaagttct gtcccctgag gtccttccca
 360
 gacactgtct acaagaagct ggtccagaga gagaagactt taaaggtag aggagtgagg
 420
 cgactccct acctggggga tgctgctgtt gtcgtgcac
 459

<210> 2326

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2326

Xaa	Arg	Val	Gln	Asp	Arg	Met	Ser	Ala	Ile	Trp	Glu	Arg	Gly	Val	Val
1			5						10					15	
Gly	Gly	Lys	Met	Asp	Glu	Asn	Arg	Phe	Val	Ala	Val	Thr	Ser	Ser	Asn
		20						25					30		
Ala	Ala	Lys	Leu	Leu	Asn	Leu	Tyr	Pro	Arg	Lys	Gly	Arg	Ile	Ile	Pro
		35					40					45			
Gly	Ala	Asp	Ala	Asp	Val	Val	Val	Trp	Asp	Pro	Glu	Ala	Thr	Lys	Thr
	50					55					60				
Ile	Ser	Ala	Ser	Thr	Gln	Val	Gln	Gly	Gly	Asp	Phe	Asn	Leu	Tyr	Glu
65				70					75					80	
Asn	Met	Arg	Cys	His	Gly	Val	Pro	Leu	Val	Thr	Ile	Ser	Arg	Gly	Arg
			85						90				95		
Val	Val	Tyr	Glu	Asn	Gly	Val	Phe	Met	Cys	Ala	Glu	Gly	Thr	Gly	Lys
			100					105					110		
Phe	Cys	Pro	Leu	Arg	Ser	Phe	Pro	Asp	Thr	Val	Tyr	Lys	Lys	Leu	Val
		115					120					125			
Gln	Arg	Glu	Lys	Thr	Leu	Lys	Val	Arg	Gly	Val	Ala	Arg	Thr	Pro	Tyr
	130					135					140				
Leu	Gly	Asp	Val	Ala	Val	Val	Val	His							
145					150										

<210> 2327

<211> 599

<212> DNA

<213> Homo sapiens

<400> 2327

gaattccaga agatcaagta ttctacgat gccctggaga agaagcagtt tctccccgtg
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 120
 tcagagatcc gagcagctga gaagaaattt gggagcaaca aggccgagat ggtggtgcct
 180
 gacttctcgg agcttttcaa ggagagagcc acagccccct tctttgtatt tcaggtgttc
 240
 tgtgtggggc tctggtgcct ggatgagtac tgggtactaca gcgtctttac gctatccatg
 300
 ctggtggcgt tcgaggcctc gctggtgcag cagcagatgc ggaacatgic ggagatccgg
 360
 aagatgggca acaagcccca catgatccag gtctaccgaa gccgcaagtg gaggccatt
 420
 gccagtgatg agatcgtacc aggggacatc gtctccatcg gtgaggccgg gttccgctca
 480
 gtcccagtg gagccccagc ctcagggcct ctggccaacc ctctgcctc tgccctgcag
 540
 gccgctcccc acaggagaac ctggtgccat gtgacgtgct tctgctgca ggcgctgc
 599

<210> 2328

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2328

Glu Phe Gln Lys Ile Lys Tyr Ser Tyr Asp Ala Leu Glu Lys Lys Gln
 1 5 10 15
 Phe Leu Pro Val Ala Phe Pro Val Gly Asn Ala Phe Ser Tyr Tyr Gln
 20 25 30
 Ser Asn Arg Gly Phe Gln Glu Asp Ser Glu Ile Arg Ala Ala Glu Lys
 35 40 45
 Lys Phe Gly Ser Asn Lys Ala Glu Met Val Val Pro Asp Phe Ser Glu
 50 55 60
 Leu Phe Lys Glu Arg Ala Thr Ala Pro Phe Phe Val Phe Gln Val Phe
 65 70 75 80
 Cys Val Gly Leu Trp Cys Leu Asp Glu Tyr Trp Tyr Tyr Ser Val Phe
 85 90 95
 Thr Leu Ser Met Leu Val Ala Phe Glu Ala Ser Leu Val Gln Gln Gln
 100 105 110
 Met Arg Asn Met Ser Glu Ile Arg Lys Met Gly Asn Lys Pro His Met
 115 120 125
 Ile Gln Val Tyr Arg Ser Arg Lys Trp Arg Pro Ile Ala Ser Asp Glu
 130 135 140
 Ile Val Pro Gly Asp Ile Val Ser Ile Gly Glu Ala Gly Phe Arg Ser
 145 150 155 160
 Val Pro Val Gly Ala Pro Ala Ser Gly Pro Leu Ala Asn Pro Pro Ala
 165 170 175
 Ser Ala Leu Gln Ala Ala Pro His Arg Arg Thr Trp Cys His Val Thr

180
Cys Phe Cys Cys Glu Ala Ala
195

185

190

<210> 2329
<211> 392
<212> DNA
<213> Homo sapiens

<400> 2329
acgcgttcca tgaatgctgg tgcggctgcc gcgattgcta tgtacgcctg gacgacgcag
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tgggtgtccaa agccacgcac tagctgacg gggagaaccg tcacctcta ggctcgtgtc
120
atgagcacgc aaccactga ggaaccactc cgactagtgg tggcattcaa tccagtgcct
180
agtgcctccc gggttgctca tcatcatgcg acgagatttc gcctggcggt gcaggccttc
240
attgtcgtcg tcattggtgg tttgtgtgg gcgttgacgg ccgacgcctt ccagttatcg
300
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360
aatctgcggc tgcacgccgc tcgcaaggat cc
392

<210> 2330
<211> 90
<212> PRT
<213> Homo sapiens

<400> 2330
Met Ser Thr Gln Pro Thr Glu Glu Pro Leu Arg Leu Val Val Ala Phe
1 5 10 15
Asn Pro Val Pro Ser Ala Ser Arg Val Ala His His His Ala Thr Arg
20 25 30
Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu
35 40 45
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp
50 55 60
Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln
65 70 75 80
Asn Leu Arg Leu His Ala Ala Arg Lys Asp
85 90

<210> 2331
<211> 2813
<212> DNA
<213> Homo sapiens

<400> 2331
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gatttaagggt gcccgagtcc acgctgatgg actgccgtag acaactgaaa gacagtaagc
120

aaattttatc tattacaaag aacttttaaag ttgagaatat tggacctctt cctataactg
180
tttcgtctct gaaaattaat gggataact gccagggtta tggattcgag gtgctggatt
240
gggattcagt ttccctgga cccaaacaca tcccgcgata tcagcattgt gttcactcca
300
gactttacct cctcctgggt aattcgggac ctaagtcttg taaccgcagc ggacctagaa
360
tttcgcttca ctctcaatgt gactctccct catcacctgt tgcccttggtg tgcagacgtg
420
gttccaggac ccagctggga ggagtcattt tggaggctca cggctcttctt tgtcagtttg
480
tccctgttgg gtgtgatttt aatagccttc caacaagcac agtacattct catggaattc
540
atgaaaacaa gacagaggca aaatgctagc tcctcttcac agcaaaacaa tggctctatg
600
gatgtaatca gccccattc ttacaaaagc aattgcaaga actttctcga tacatatggc
660
ccctctgata aaggcagggg gaagaactgc cttccagtga acactcccca aagcaggatc
720
cagaatgctg caaagaggag ccagccacc tatggtcatt ctcagaagaa gcacaaatgc
780
tcagtgtatt acagtaaaca caaaaccagc acagctgagg ccagcagcac cagcacgact
840
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900
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960
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1020
aaaaacacaa ttgttttcag taatccttct tcagaatgta gtatgaagga gggaatacag
1080
acatgtatgt ttcttaagga aactgacatt aaaacttcag agaacacagc tgagttcaag
1140
gaacgggagc tctgtccact gaagacctcc aagaaactac ctgaaaacca tttaccaaga
1200
aactcacctc agtaccacca gccagacttg ccagaaattt ccaggaaaaa taatgggaat
1260
aaccagcaag tacctgtcaa gaatgaagta gatcattgtg aaaatttgaa gaagggtggc
1320
acaaagcctt cttcagaaaa gaagattcac aaaacatcta gagaagacat gttttctgag
1380
aaacaggaca tacctttcgt agagcaagaa gatccttata ggaagaaaaa gcttcaggag
1440
aaaagagaag gaaatttaca aaatttaaag tggagtaaaa gtogaacatg tagaaagaac
1500
aagaaaaggg gtgttgctcc agtctcaagg cctcctgaac agagtgatct aaagcttggtg
1560
tgcagtgact ttgagaggtc tgagctgagc agtgacatca atgtaagaag ctggtgtata
1620
caggaaagca ctaggagggt ttgtaaagca gatgccgaaa ttgcaagcag tttacctgct
1680
gccagagag aggcagggtta ctaccagaag cctgagaaga aatgtgtgga caagttctgc
1740

tccgattcca gctctgactg tgggagctcc tctggcagcg tgcgtgccag ccggggcagc
 1800
 tgggggagct ggagcagcac cagcagctcc gacggggata agaagcccat ggtggacgcc
 1860
 cagcacttcc tgccggccgg agacagtgtt tcacaaaatg attttccttc tgaagctccc
 1920
 atctccttga atctttctca taacatctgc aatcccatga ccgtgaatag tctcccacaa
 1980
 tacgcagagc cttcctgtcc cagccttctt gccggggcca cagggtgttg agaagataaa
 2040
 ggtctttact cacctggaga cctgtggccc actccgccag tgtgtgtgac aagcagctta
 2100
 aactgcaccc tggagaacgg cgtgccttgt gtgattcagg agtcggcccc ggttcataat
 2160
 agtttcattg attggagtgc aacatgcgaa ggccagtttt ccagcgcata ctgtccattg
 2220
 gaattgaacg attacaatgc ctttccagaa gaaaacatga actatgccaa tggtttcccc
 2280
 tgtcctgcag atgttcagac agactttatt gatcacaact ctcagtctac ctggaacacc
 2340
 ccaccaaca tgctgtctgc ctggggacat gccagtttca tcagctctcc gccctacctc
 2400
 acaagcaccc gaagcttgtc tccaatgtct ggactttttg gttccatctg ggccccgcaa
 2460
 agcgatgtgt atgaaaattg ctgccccatc aacccccacca cggaacattc gaccacatg
 2520
 gaaaaccaag cggctgtgtg caaggaatac taccgggggt tcaaccggtt tcgcgcctat
 2580
 atgaacctgg acatatggac taccacagcg aataggaatg caaatttccc actgtctaga
 2640
 gactcgagtt actgtgggaa tgtgtgaaaa taattggatt tttaaacaat gtgaataaag
 2700
 aggcttgtgt tttgattact agtgtaaact ggttattgag atagattatg acattgggtg
 2760
 atattttggc acttttatat gaaaataaat tttttaatga aaaaaaaaaa aaa
 2813

<210> 2332

<211> 789

<212> PRT

<213> Homo sapiens

<400> 2332

Pro Asp Phe Thr Ser Ser Trp Val Ile Arg Asp Leu Ser Leu Val Thr
 1 5 10 15
 Ala Ala Asp Leu Glu Phe Arg Phe Thr Leu Asn Val Thr Leu Pro His
 20 25 30
 His Leu Leu Pro Leu Cys Ala Asp Val Val Pro Gly Pro Ser Trp Glu
 35 40 45
 Glu Ser Phe Trp Arg Leu Thr Val Phe Phe Val Ser Leu Ser Leu Leu
 50 55 60
 Gly Val Ile Leu Ile Ala Phe Gln Gln Ala Gln Tyr Ile Leu Met Glu
 65 70 75 80
 Phe Met Lys Thr Arg Gln Arg Gln Asn Ala Ser Ser Ser Ser Gln Gln

1705

515 520 525
 Asp Ser Val Ser Gln Asn Asp Phe Pro Ser Glu Ala Pro Ile Ser Leu
 530 535 540
 Asn Leu Ser His Asn Ile Cys Asn Pro Met Thr Val Asn Ser Leu Pro
 545 550 555 560
 Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly
 565 570 575
 Val Glu Glu Asp Lys Gly Leu Tyr Ser Pro Gly Asp Leu Trp Pro Thr
 580 585 590
 Pro Pro Val Cys Val Thr Ser Ser Leu Asn Cys Thr Leu Glu Asn Gly
 595 600 605
 Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile
 610 615 620
 Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro
 625 630 635 640
 Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr
 645 650 655
 Ala Asn Gly Phe Pro Cys Pro Ala Asp Val Gln Thr Asp Phe Ile Asp
 660 665 670
 His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala
 675 680 685
 Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr
 690 695 700
 Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro
 705 710 715 720
 Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu
 725 730 735
 His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr
 740 745 750
 Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr
 755 760 765
 Thr Thr Ala Asn Arg Asn Ala Asn Phe Pro Leu Ser Arg Asp Ser Ser
 770 775 780
 Tyr Cys Gly Asn Val
 785

<210> 2333

<211> 501

<212> DNA

<213> Homo sapiens

<400> 2333

cgtatgattg gtgtgggaca aatactattc aacaagagta cctaaatcat tgtttaaggc
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gaagtaataa atatgaatgg ggtgtatcat ataatagaaca acgaatatcc atatagtcca
 120

gacgaagttc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta
 180

aaaagctatc atattgctta tgaagcacat aaaggtcagt tccgaaaaaa cggattacca
 240

tacattatgc atcctataca agttgcaggt attttaacag aaatgcgatt agacggaccg
 300

acgattgtcg caggtttttt gcatgatgta attgaagata caccgtatac atttgaagat
 360

gtaaaagaaa tgttcaatga agaagttgct cgaattggtg atggtgtgac gaagcttaaa
 420
 aaaataaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttatttatt
 480
 gcgattgcca aagatgtacg c
 501

<210> 2334

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2334

Met	Asn	Gly	Val	Tyr	His	Ile	Met	Asn	Asn	Glu	Tyr	Pro	Tyr	Ser	Ala
1				5					10					15	
Asp	Glu	Val	Leu	His	Lys	Ala	Lys	Ser	Tyr	Leu	Ser	Ala	Asp	Glu	Tyr
		20						25				30			
Glu	Tyr	Val	Leu	Lys	Ser	Tyr	His	Ile	Ala	Tyr	Glu	Ala	His	Lys	Gly
		35					40					45			
Gln	Phe	Arg	Lys	Asn	Gly	Leu	Pro	Tyr	Ile	Met	His	Pro	Ile	Gln	Val
	50				55						60				
Ala	Gly	Ile	Leu	Thr	Glu	Met	Arg	Leu	Asp	Gly	Pro	Thr	Ile	Val	Ala
65				70					75					80	
Gly	Phe	Leu	His	Asp	Val	Ile	Glu	Asp	Thr	Pro	Tyr	Thr	Phe	Glu	Asp
			85					90					95		
Val	Lys	Glu	Met	Phe	Asn	Glu	Glu	Val	Ala	Arg	Ile	Val	Asp	Gly	Val
			100					105					110		
Thr	Lys	Leu	Lys	Lys	Ile	Lys	Tyr	Arg	Ser	Lys	Glu	Glu	Gln	Gln	Ala
	115					120						125			
Glu	Asn	His	Arg	Lys	Leu	Phe	Ile	Ala	Ile	Ala	Lys	Asp	Val	Arg	
	130					135						140			

<210> 2335

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2335

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 tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac
 120
 cccatggggc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc
 180
 acccgctgc agttggaaca ggaggctgag agctttaggg agctggaggc ccttgcccag
 240
 ggcagcccac ccagccctgg tgaggaggcc ctggtccta ctttccact ggccaagccc
 300
 cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttcaca
 360
 gcatcttcat cagcatcggg cactagt
 387

<210> 2336

<211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2336
 Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu
 1 5 10 15
 Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His
 20 25 30
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser
 35 40 45
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly
 50 55 60
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn
 65 70 75 80
 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser
 85 90 95
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser
 100 105

<210> 2337
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 2337
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 accatgtgca gctcaagaat gccctccggc ccatcggcct cggggcaggg gaagggcagc
 120
 ttctctgcac cagcttcctt gctgggctcc agggcccaca ggctgaggcc gggggcccag
 180
 gggtaaatgc caggcacctt gctattgagg aacctatcca ggaggaagga ctccgggcaga
 240
 cctgcgggat cctcgtcttc ccacgggtcc tcatggcaga agcagaagga gctggagtcg
 300
 ctgaggtccg tgggcaggcg ggctggggcc aacgtggggt caccgacctc ctcaaagct
 359

<210> 2338
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2338
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly
 1 5 10 15
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His
 20 25 30
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu
 35 40 45
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser
 50 55 60
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu


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<210> 2339
<211> 439
<212> DNA
<213> Homo sapiens
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<210> 2340
<211> 92
<212> PRT
<213> Homo sapiens
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<210> 2341
<211> 411
<212> DNA
<213> Homo sapiens
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1709

gccaaacctc ccctccatcc tgcccaagat ggatcttgct gagcctccct ggcatatgcc
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 tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaagggag aagaggagag
 120
 ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctctgtgag cgggtcccca
 180
 ggagccaccg cacaggccca tgcccttca cctagacca gcagcagcac cagcagccag
 240
 agtcctgggg ccacccggca caggcaggag gattctggag accaggccac atcaggcnat
 300
 ggaagtggag agcagtgtga aaccacctt gtcagtgcc tcagtcaccc caagtacagt
 360
 ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n
 411

<210> 2342

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2342

Ala	Ser	Leu	Ala	Tyr	Ala	Ser	Ala	Gly	Gly	Ala	Arg	Gly	Gly	His	Gly
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Gly	Gly	Gly	Gly	Lys	Gly	Arg	Arg	Gly	Glu	Gly	Glu	Gly	Ser	Arg	Gly
		20						25				30			
Gly	Gly	Gly	Arg	Gly	Arg	Ala	Ala	Pro	Val	Ser	Gly	Ser	Pro	Gly	Ala
		35					40				45				
Thr	Ala	Gln	Ala	His	Ala	Pro	Ser	Pro	Ser	Thr	Ser	Ser	Ser	Thr	Ser
	50					55				60					
Ser	Gln	Ser	Pro	Gly	Ala	Thr	Arg	His	Arg	Gln	Glu	Asp	Ser	Gly	Asp
65				70					75				80		
Gln	Ala	Thr	Ser	Gly	Xaa	Gly	Ser	Gly	Glu	Gln	Cys	Glu	Thr	His	Leu
			85					90					95		
Val	Ser	Ala	Leu	Ser	His	Pro	Lys	Tyr	Ser	Gly	Pro	Gly	Gly	Ser	Glu
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Leu

<210> 2343

<211> 522

<212> DNA

<213> Homo sapiens

<400> 2343

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<210> 2344
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 2344
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 Met Gly Asn Thr Gln Asp Met Phe Ser Pro Asp Gln Ser Ser Met Pro
 35 40 45
 Met Ser Asn Val Gly Thr Thr Arg Leu Ser His Met Pro Leu Pro Pro
 50 55 60
 Ala Ser Asn Pro Pro Gly Thr Val His Ser Ala Pro Asn Arg Gly Leu
 65 70 75 80
 Gly Arg Arg Pro Ser Asp Leu Thr Ile Ser Ile Asn Gln Met Gly Ser
 85 90 95
 Pro Gly Met Gly His Leu Lys Ser Pro Thr Leu Ser Gln Val His Ser
 100 105 110
 Pro Leu Val Thr Ser Pro Ser Ala Asn Leu Lys Ser Pro Gln Thr Pro
 115 120 125
 Ser Gln Met Val Pro Leu Pro Ser Ala Asn Pro Pro Gly Pro Leu Lys
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 Ser Pro Gln Val Leu Gly Ser Ser Leu Ser Val Arg Ser Pro Thr Gly
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<210> 2345
 <211> 561
 <212> DNA
 <213> Homo sapiens

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<210> 2346

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2346

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			20					25					30		
Asp	Ala	Leu	Asp	Arg	Arg	Arg	Arg	Leu	Ala	Leu	Pro	Pro	Phe	Cys	Arg
		35					40					45			
Phe	Arg	Leu	Phe	Leu	Arg	Phe	Trp	Cys	Leu	Leu	Glu	Ala	Cys	Ala	Pro
	50					55					60				
Ala	Ser	Pro	Ala	Leu	Ser	Glu	Ser	Leu	Ala	Leu	Ser	Asp	Val	Ser	Asp
65				70					75					80	
Ser	Gln	Phe	Cys	Ser	Arg	Arg	Ser	Asp	Ser	Leu	Ser	Thr	Ile	Ala	Ile
			85					90					95		
Asn	Ala	Lys	Asn	Ala	Asn	Glu	Lys	Asn	Ile	Ile	Trp	Val	Asn	Tyr	Leu
		100						105					110		
Leu	Ser	Asn	Pro	Glu	Tyr	Lys	Asp	Thr	Pro	Met	Asp	Ile	Ala	Gln	Leu
		115					120				125				
Pro	His	Leu	Pro	Glu	Lys	Thr	Ser	Glu	Ser	Ser	Glu	Thr	Ser	Asp	Ser
	130					135					140				
Glu	Ser	Asp	Ser	Lys	Asp	Thr	Ser	Gly	Ile	Thr	Glu	Asp	Asn	Glu	Asn
145				150					155					160	
Ser	Lys	Xaa	Pro	Thr	Arg	Arg	Gly	Thr	Ser	Pro	Arg	Thr	Ala	Lys	Thr
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<210> 2347

<211> 375

<212> DNA

<213> Homo sapiens

<400> 2347

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<210> 2348

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2348

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Lys	Arg	Gly	Ile	Glu	Asn	Val	Glu	Tyr	Ala	Cys	Ala	Ala	Pro	Glu	Val
		20					25						30		
Leu	Lys	Gly	Glu	Tyr	Ser	Arg	Asn	Val	Gly	Pro	Asn	Ile	Asp	Ala	Trp
	35					40						45			
Ser	Asp	Phe	Gln	Pro	Leu	Gly	Val	Val	Ala	Gly	Ile	Thr	Pro	Phe	Asn
	50					55					60				
Phe	Pro	Ala	Met	Val	Pro	Leu	Trp	Met	Tyr	Pro	Leu	Ala	Ile	Val	Cys
65				70					75					80	
Gly	Asn	Cys	Phe	Ile	Leu	Lys	Pro	Ser	Glu	Arg	Asp	Pro	Ser	Ser	Thr
			85					90						95	
Leu	Leu	Ile	Ala	Gln	Leu	Leu	Gln	Glu	Ala	Gly	Leu	Pro	Lys	Gly	Val
		100						105					110		
Leu	Asn	Val	Val	His	Gly	Asp	Lys	Thr	Ala	Val	Asp	Ala			
	115						120					125			

<210> 2349

<211> 417

<212> DNA

<213> Homo sapiens

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<210> 2350

<211> 139
 <212> PRT
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<400> 2350

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			20					25					30		
Leu	Ala	Phe	Leu	Asp	Asp	Ile	Ile	Ala	His	Asn	His	Ile	Lys	Trp	Ile
			35				40					45			
Gly	Asn	Thr	Asn	Glu	Leu	Asn	Ala	Ser	Tyr	Ala	Ala	Asp	Gly	Tyr	Ala
	50					55					60				
Arg	Ile	Asn	Gly	Ile	Gly	Ala	Met	Val	Thr	Thr	Phe	Gly	Val	Gly	Glu
65					70					75				80	
Leu	Ser	Ala	Val	Asn	Gly	Ile	Ala	Gly	Ser	Tyr	Ala	Glu	Arg	Val	Pro
				85				90						95	
Val	Ile	Ala	Ile	Thr	Gly	Ala	Pro	Thr	Arg	Ala	Val	Glu	Gln	Glu	Gly
			100				105							110	
Lys	Tyr	Val	His	His	Ser	Leu	Gly	Glu	Gly	Thr	Phe	Asp	Asp	Tyr	Arg
		115				120						125			
Lys	Met	Phe	Glu	Pro	Ile	Thr	Thr	Ala	Gln	Ala					
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<210> 2351
 <211> 696
 <212> DNA
 <213> Homo sapiens

<400> 2351

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 35 40 45
 Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu
 50 55 60
 Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly
 65 70 75 80
 Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly
 85 90 95
 Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr
 100 105 110
 Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val
 115 120 125
 Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser
 130 135 140
 Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val
 145 150 155 160
 Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala
 165 170 175
 Phe Ala His Asp Gly Asp Ala Val Leu Leu Leu Gly Thr Thr Lys Cys
 180 185 190
 Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu
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<210> 2353
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 <212> DNA
 <213> Homo sapiens

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<210> 2354
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 35 40 45
 Val Asn Asn Ala Gly Ile Thr Gln Asp Thr Leu Met Leu Lys Met Thr
 50 55 60
 Glu Glu Asp Phe Glu Lys Val Ile Lys Ile Asn Leu Thr Gly Ala Phe
 65 70 75 80
 Asn Met Thr Gln Ala Val Leu Lys Gln Met Ile Lys Ala Arg Glu Gly
 85 90 95
 Ala Ile Ile Asn Met Ser Ser Val Val Gly Leu Met Gly Asn Ile Gly
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 Gln Ala Asn Tyr Ala Ala Ser Lys Ala Gly Leu Ile Gly Phe Thr Lys
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 <213> Homo sapiens

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5191

<210> 2356

<211> 1000

<212> PRT

<213> Homo sapiens

<400> 2356

Leu Ala Lys Phe Asp Gly Glu Val Ile Cys Glu Pro Pro Asn Asn Lys
 1 5 10 15
 Leu Asp Lys Phe Ser Gly Thr Leu Tyr Trp Lys Glu Asn Lys Phe Pro
 20 25 30
 Leu Ser Asn Gln Asn Met Leu Leu Arg Gly Cys Val Leu Arg Asn Thr
 35 40 45
 Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu
 50 55 60
 Met Gln Asn Ser Gly Arg Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg
 65 70 75 80
 Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Val Cys Met
 85 90 95
 Gly Val Ile Leu Ala Ile Gly Asn Ala Ile Trp Glu His Glu Val Gly
 100 105 110
 Met Arg Phe Gln Val Tyr Leu Pro Trp Asp Glu Ala Val Asp Ser Ala
 115 120 125
 Phe Phe Ser Gly Phe Leu Ser Phe Trp Ser Tyr Ile Ile Ile Leu Asn
 130 135 140
 Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu
 145 150 155 160
 Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys
 165 170 175
 Lys Arg Thr Pro Ala Glu Ala Arg Thr Thr Thr Leu Asn Glu Glu Leu
 180 185 190
 Gly Gln Val Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln
 195 200 205
 Asn Ile Met Val Phe Asn Lys Cys Ser Ile Asn Gly His Ser Tyr Gly
 210 215 220
 Asp Val Phe Asp Val Leu Gly His Lys Ala Glu Leu Gly Glu Arg Pro
 225 230 235 240
 Glu Pro Val Asp Phe Ser Phe Asn Pro Leu Ala Asp Lys Lys Phe Leu
 245 250 255
 Phe Trp Asp Pro Ser Leu Leu Glu Ala Val Lys Ile Gly Asp Pro His
 260 265 270
 Thr His Glu Phe Phe Arg Leu Leu Ser Leu Cys His Thr Val Met Ser
 275 280 285
 Glu Glu Lys Asn Glu Gly Glu Leu Tyr Tyr Lys Ala Gln Ser Pro Asp
 290 295 300
 Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Val Phe Arg
 305 310 315 320
 Ser Arg Thr Pro Lys Thr Ile Thr Val His Glu Met Gly Thr Ala Ile
 325 330 335
 Thr Tyr Gln Leu Leu Ala Ile Leu Asp Phe Asn Asn Ile Arg Lys Arg
 340 345 350
 Met Ser Val Ile Val Arg Asn Pro Glu Gly Lys Ile Arg Leu Tyr Cys
 355 360 365
 Lys Gly Ala Asp Thr Ile Leu Leu Asp Arg Leu His His Ser Thr Gln
 370 375 380
 Glu Leu Leu Asn Thr Thr Met Asp His Leu Asn Glu Tyr Ala Gly Glu
 385 390 395 400
 Gly Leu Arg Thr Leu Val Leu Ala Tyr Lys Asp Leu Asp Glu Glu Tyr
 405 410 415
 Tyr Glu Glu Trp Ala Glu Arg Arg Leu Gln Ala Ser Leu Ala Gln Asp

420 425 430
 Ser Arg Glu Asp Arg Leu Ala Ser Ile Tyr Glu Glu Val Glu Asn Asn
 435 440 445
 Met Met Leu Leu Gly Ala Thr Ala Ile Glu Asp Lys Leu Gln Gln Gly
 450 455 460
 Val Pro Glu Thr Ile Ala Leu Leu Thr Leu Ala Asn Ile Lys Ile Trp
 465 470 475 480
 Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Val Asn Ile Gly Tyr Ser
 485 490 495
 Cys Lys Met Leu Thr Asp Asp Met Thr Glu Val Phe Ile Val Thr Gly
 500 505 510
 His Thr Val Leu Glu Val Arg Glu Glu Xaa Gln Glu Ser Pro Gly Glu
 515 520 525
 Asp Asp Gly Leu Ile Xaa Arg Ser Val Gly Asn Gly Phe Thr Tyr Gln
 530 535 540
 Asp Lys Leu Ser Ser Ser Lys Leu Thr Ser Val Leu Glu Ala Val Ala
 545 550 555 560
 Gly Glu Tyr Ala Leu Val Ile Asn Gly His Ser Leu Ala His Ala Leu
 565 570 575
 Glu Ala Asp Met Glu Leu Glu Phe Leu Glu Thr Ala Cys Ala Cys Lys
 580 585 590
 Ala Val Ile Cys Cys Arg Val Thr Pro Leu Gln Lys Ala Gln Val Val
 595 600 605
 Glu Leu Val Lys Lys Tyr Lys Lys Ala Val Thr Leu Ala Ile Gly Asp
 610 615 620
 Gly Ala Asn Asp Val Ser Met Ile Lys Thr Ala His Ile Gly Val Gly
 625 630 635 640
 Ile Ser Gly Gln Glu Gly Ile Gln Ala Val Leu Ala Ser Asp Tyr Ser
 645 650 655
 Phe Ser Gln Phe Lys Phe Leu Gln Arg Leu Leu Leu Val His Gly Arg
 660 665 670
 Trp Ser Tyr Leu Arg Met Cys Lys Phe Leu Cys Tyr Phe Phe Tyr Lys
 675 680 685
 Asn Phe Ala Phe Thr Met Val His Phe Trp Phe Gly Phe Phe Cys Gly
 690 695 700
 Phe Ser Ala Gln Thr Val Tyr Asp Gln Tyr Phe Ile Thr Leu Tyr Asn
 705 710 715 720
 Ile Val Tyr Thr Ser Leu Pro Val Leu Ala Met Gly Val Phe Asp Gln
 725 730 735
 Asp Val Pro Glu Gln Arg Ser Met Glu Tyr Pro Lys Leu Tyr Glu Pro
 740 745 750
 Gly Gln Leu Asn Leu Leu Phe Asn Lys Arg Glu Phe Phe Ile Cys Ile
 755 760 765
 Ala Gln Gly Ile Tyr Thr Ser Val Leu Met Phe Phe Ile Pro Tyr Gly
 770 775 780
 Val Phe Ala Asp Ala Thr Arg Asp Asp Gly Thr Gln Leu Ala Asp Tyr
 785 790 795 800
 Gln Ser Phe Ala Val Thr Val Ala Thr Ser Leu Val Ile Val Val Ser
 805 810 815
 Val Gln Ile Gly Leu Asp Thr Gly Tyr Trp Thr Ala Ile Asn His Phe
 820 825 830
 Phe Ile Trp Gly Ser Leu Ala Val Tyr Phe Ala Ile Leu Phe Ala Met
 835 840 845
 His Ser Asn Gly Leu Phe Asp Met Phe Pro Asn Gln Phe Arg Phe Val

850 855 860
 Gly Asn Ala Gln Asn Thr Leu Ala Gln Pro Thr Val Trp Leu Thr Ile
 865 870 875 880
 Val Leu Thr Thr Val Val Cys Ile Met Pro Val Val Ala Phe Arg Phe
 885 890 895
 Leu Arg Leu Asn Leu Lys Pro Asp Leu Ser Asp Thr Val Arg Tyr Thr
 900 905 910
 Gln Leu Val Arg Lys Lys Gln Lys Ala Gln His Arg Cys Met Arg Arg
 915 920 925
 Val Gly Arg Thr Gly Ser Arg Arg Ser Gly Tyr Ala Phe Ser His Gln
 930 935 940
 Glu Gly Phe Gly Glu Leu Ile Met Ser Gly Lys Asn Met Arg Leu Ser
 945 950 955 960
 Ser Leu Ala Leu Ser Ser Phe Thr Thr Arg Ser Ser Ser Ser Trp Ile
 965 970 975
 Glu Ser Leu Arg Arg Lys Lys Ser Asp Ser Ala Ser Ser Pro Ser Gly
 980 985 990
 Gly Ala Asp Lys Pro Leu Lys Gly
 995 1000

<210> 2357

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2357

nacgcgttac gttgctggag gtcaatgcgt catgccgata catcatcaga tccgcactgt
 60
 ggcgaccatc cttgccacca ttaccattgc cgccctagtgc ctcacgggct gtaatacggc
 120
 ggtgcgccaa acggtgaaga cgaggtttcc cgcaagctca tcaccgtgtg ggggtgctgag
 180
 ccacaaaacc cactectgcc agccgacacc aatgaaaccg gcggcacgaa agtcatcacc
 240
 gccttggtcg ccggcctggt gtattacgac gccgacggca aaaccataa tgatgtggcc
 300
 aaatccattg acttcgatgg cgaccgcacc tacacggtga cgctgcggaa aaccagattc
 360
 gccgacggta ctgaggtgaa ggcccataat tttgtgaaag ctgccgca
 408

<210> 2358

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2358

Tyr Gly Gly Ala Pro Asn Gly Glu Asp Glu Val Ser Arg Lys Leu Ile
 1 5 10 15
 Thr Val Trp Gly Ala Glu Pro Gln Asn Pro Leu Leu Pro Ala Asp Thr
 20 25 30
 Asn Glu Thr Gly Gly Thr Lys Val Ile Thr Ala Leu Phe Ala Gly Leu
 35 40 45
 Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser

50		55		60	
Ile	Asp	Phe	Asp	Gly	Asp
	Arg	Thr	Tyr	Thr	Val
	Thr	Leu	Arg	Lys	Thr
65		70		75	80
Arg	Phe	Ala	Asp	Gly	Thr
	Glu	Val	Lys	Ala	His
	Asn	Phe	Val	Lys	Ala
	85		90		95
Ala	Ala				

<210> 2359
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 2359
 aacctgaaca tggtgggatt gagagagccc gaggtgtatg ggtcggaaac attggccgac
 60
 gttgagcaga cgtgtcgtga gtacggcgaa gaacttgggc ttgtaattga gtttcagcaa
 120
 accaatcacg aagggcaaat gattgaatgg attcaccacg cccgtagaag gattgcgggg
 180
 attgtgatca atccaggagc atggacccat acatcggcag ccacccacga tgcgttgatt
 240
 gcagccgagg taccggtgat tgagggtcac atctcaaag tccacaggcg tgaagatttc
 300
 aggcattttt cctacgtgac acgc
 324

<210> 2360
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2360																			
Asn	Leu	Asn	Met	Leu	Gly	Leu	Arg	Glu	Pro	Glu	Val	Tyr	Gly	Ser	Glu				
1				5				10						15					
Thr	Leu	Ala	Asp	Val	Glu	Gln	Thr	Cys	Arg	Glu	Tyr	Gly	Glu	Glu	Leu				
		20						25					30						
Gly	Leu	Val	Ile	Glu	Phe	Gln	Gln	Thr	Asn	His	Glu	Gly	Gln	Met	Ile				
		35					40					45							
Glu	Trp	Ile	His	His	Ala	Arg	Arg	Arg	Ile	Ala	Gly	Ile	Val	Ile	Asn				
		50				55					60								
Pro	Gly	Ala	Trp	Thr	His	Thr	Ser	Ala	Ala	Ile	His	Asp	Ala	Leu	Ile				
65					70					75				80					
Ala	Ala	Glu	Val	Pro	Val	Ile	Glu	Val	His	Ile	Ser	Asn	Val	His	Arg				
			85					90					95						
Arg	Glu	Asp	Phe	Arg	His	Phe	Ser	Tyr	Val	Ser	Arg								
		100						105											

<210> 2361
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 2361

tccggatggg actccaacct acttgggggt actgggggtg cagaaagaac gcggccctgt
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 gtcagggacc ggtatggaag cctcagtagg gctggagccc catcatgcc cttccgagca
 120
 gatcaacaca gaccagctgg tcaaggggga cctccatccc tgcctgtcc tcacggagct
 180
 gtagggagag tcccaaaggc aggtggtggg gctggggcct ccaacagctg ggtcctctca
 240
 tatcacttaa ggcccaacag cacacagtct cccaagtgtg ccaggtgcc caacacggcc
 300
 atcccgtctt cacagctcca ccccgctgc ctgctgcc caatctccac aaacatatgc
 360
 tgcagctcca caccgggaa acaccacatg ctgcttt
 398

<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

Met Pro Leu Pro Ser Arg Ser Thr Gln Thr Ser Trp Ser Arg Gly Thr
 1 5 10 15
 Ser Ile Pro Ala Leu Ser Ser Arg Ser Cys Arg Glu Ser Pro Lys Gly
 20 25 30
 Arg Trp Trp Gly Trp Gly Leu Gln Gln Leu Gly Pro Leu Ile Ser Leu
 35 40 45
 Lys Ala Gln Gln His Thr Val Ser Gln Val Cys Gln Val Pro Gln His
 50 55 60
 Gly His Pro Ala Leu Thr Ala Pro Pro Arg Leu Pro Ala Cys His His
 65 70 75 80
 Leu His Lys His Met Leu Gln Leu His Thr Arg Glu Thr Pro His Ala
 85 90 95
 Arg Phe

<210> 2363

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2363

nngactctc tagctcccaa cgcaaaagcg tttaaagatg cagctcagaa gcatcaccag
 60
 cagcacaagg ggaggtccca agaaccagaa cttacatcac tgcctccgag ttcagaggtt
 120
 tcctttecca ccttctcaga actttctgtt tccatggcct cctctgccac ctctgccacc
 180
 tccctgatg tgctggctc cgtttccatc gcttctcat gggtttcttc cggccggtgt
 240
 tccaagccca ctgcangtcg aagcaaacgt gattgcgtta ccactcagaa ggtggcacag
 300
 ggactggcag cgggtgccatc tgggagtctg tgtgtcagc ctccgagtgc aggttcccc
 360

ggccctgct gtggtgctag gtcccagat gagagatcac ggtcatgaag atcagcccc
 420
 aaggcagccc ctccnttcc agcctgggct ctggcgtgtt ctaggtgctc acttccatgg
 480
 ctggcctgct cacagagccc tacctcagcc tgtggttaagc gcacctgctc ggccctgggtg
 540
 ctctatgatg agccaccagt cagttctgca gatgtgtccc cgagctcctg ccgaggggacg
 600
 aaacacgggtg gccctgctcc tagtgctgt gcacgccacg ctccacacct gccatctgcc
 660
 cttccaccac ctgctcccc aggggctccg cctcgtgact cagctcagg caagtctccg
 720
 ggcggaaca gctggtgat ggtgacatgc tgcagcctgg tcacatcaga aaccatgagg
 780
 gtggatctcc ggaggtcatc gatgtggaca gactgccaca gcccttcacg cgt
 833

<210> 2364

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2364

Xaa	Thr	Pro	Leu	Ala	Pro	Asn	Ala	Lys	Ala	Phe	Lys	Asp	Ala	Ala	Gln
1				5				10					15		
Lys	His	His	Gln	Gln	His	Lys	Gly	Arg	Ser	Gln	Glu	Pro	Glu	Leu	Thr
			20				25					30			
Ser	Leu	Pro	Pro	Ser	Ser	Glu	Val	Ser	Phe	Pro	Thr	Phe	Ser	Glu	Leu
	35					40					45				
Ser	Val	Ser	Met	Ala	Ser	Ser	Ala	Thr	Ser	Ala	Thr	Ser	Pro	Asp	Val
	50				55				60						
Leu	Ala	Ser	Val	Ser	Ile	Ala	Ser	Ser	Trp	Arg	Ser	Ser	Ala	Arg	Cys
65				70				75					80		
Ser	Lys	Pro	Thr	Ala	Xaa	Arg	Ser	Lys	Arg	Asp	Cys	Val	Thr	Thr	Gln
			85			90					95				
Lys	Val	Ala	Gln	Gly	Leu	Ala	Ala	Val	Pro	Ser	Gly	Ser	Leu	Cys	Ala
		100				105						110			
Gln	Pro	Pro	Ser	Ala	Gly	Phe	Pro	Gly	Pro	Cys	Cys	Gly	Ala	Arg	Ser
		115				120						125			
Pro	Asp	Glu	Arg	Ser	Arg	Ser									
	130				135										

<210> 2365

<211> 429

<212> DNA

<213> Homo sapiens

<400> 2365

accggtgccc agctcccacg gctcgtccag acctacgttg agaaacttcg acgagacagt
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 ctccgtcagt tcgccaaca acctctgaac gaagtcaaga ttctccggca ctggagccaa
 120
 ggtgcttgcc ctggcatgaa cgccccaggg gaggtcgacg ccgtcgggat tctcacaccg
 180

atggtgatgg gactcgggtt ccaaccacgg ttccatgtga cccagacagt tctggttggc
 240
 cccgagctcg atgcctcgtc cgcgacacag accatcgagc cacctcatgt cctccgccgt
 300
 cacggggctg cggtcggccc acacctcctc ctcaccggg taggcaaata ccgtttcacc
 360
 atagagctca aggtgattga gaccacaccg cgccatgacg cgcgtcagga aatcaagagt
 420
 ggaacgcgt
 429

<210> 2366

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2366

Met	Ala	Arg	Cys	Gly	Leu	Asn	His	Leu	Glu	Leu	Tyr	Gly	Glu	Ala	Gly
1				5					10					15	
Phe	Ala	Tyr	Arg	Gly	Glu	Glu	Glu	Val	Trp	Ala	Asp	Arg	Ser	Pro	Val
			20					25					30		
Thr	Ala	Glu	Asp	Met	Arg	Trp	Leu	Asp	Gly	Leu	Cys	Arg	Gly	Arg	Gly
		35					40					45			
Ile	Glu	Leu	Gly	Ala	Asn	Gln	Asn	Cys	Leu	Gly	His	Met	Glu	Pro	Trp
	50					55					60				
Leu	Glu	Thr	Glu	Ser	His	His	His	Arg	Cys	Glu	Asn	Pro	Asp	Gly	Val
65				70					75					80	
Asp	Leu	Pro	Trp	Gly	Val	His	Ala	Arg	Ala	Ser	Thr	Leu	Ala	Pro	Val
			85						90					95	
Pro	Glu	Asn	Leu	Asp	Phe	Val	Gln	Arg	Leu	Leu	Gly	Glu	Leu	Thr	Glu
		100					105						110		
Thr	Val	Ser	Ser	Lys	Phe	Leu	Asn	Val	Gly	Leu	Asp	Glu	Pro	Trp	Glu
		115					120					125			
Leu	Gly	Thr	Gly												
			130												

<210> 2367

<211> 474

<212> DNA

<213> Homo sapiens

<400> 2367

ngtgcacggg agaagacgtg cgcgcagttc ggcggaacct atccgggttc ggccggcagt
 60
 ggggggtcacg agctcaccga cgcgcgcgcg ttcgcctcgt ggggcgtcga ttctgtcaaa
 120
 tacgateggt gctccgggtga ctccgcgcac gacgaccagg tcgcctcgtt caccgcgatg
 180
 cgtgacgcaa tccgatccac cggacgcccc atggtgtaca gcatcaacct caacagcgaa
 240
 tcgccggatc ggtccggagc ccaattcgat tggggcggtg tggcaaccat gacacgtacc
 300
 accaacgaca tctcgcgggt gtggaccact cggccggcgg gtgccgatgc gacaccggca
 360

tcggggtatc aggggatccg cgacatcatc gacgccgtgg ccccgatcgg cgcacgggtt
 420
 gcgacggcag cttcgtcgac atggacatgc tcgtcgtcgg tgcgggaac gcgt
 474

<210> 2368

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2368

Xaa	Ala	Arg	Glu	Lys	Thr	Cys	Ala	Gln	Phe	Gly	Gly	Thr	Tyr	Pro	Gly
1				5					10					15	
Ser	Ala	Gly	Ser	Gly	Gly	His	Glu	Leu	Thr	Asp	Ala	Arg	Ala	Phe	Ala
		20						25					30		
Ser	Trp	Gly	Val	Asp	Phe	Val	Lys	Tyr	Asp	Arg	Cys	Ser	Gly	Asp	Ser
		35					40				45				
Ala	His	Asp	Asp	Gln	Val	Ala	Ser	Phe	Thr	Ala	Met	Arg	Asp	Ala	Ile
	50					55				60					
Arg	Ser	Thr	Gly	Arg	Pro	Met	Val	Tyr	Ser	Ile	Asn	Pro	Asn	Ser	Glu
65				70					75					80	
Ser	Pro	Asp	Arg	Ser	Gly	Ala	Gln	Phe	Asp	Trp	Gly	Gly	Val	Ala	Thr
			85					90					95		
Met	Thr	Arg	Thr	Thr	Asn	Asp	Ile	Ser	Pro	Val	Trp	Thr	Thr	Arg	Pro
		100					105						110		
Ala	Gly	Ala	Asp	Ala	Thr	Pro	Ala	Ser	Gly	Tyr	Gln	Gly	Ile	Arg	Asp
	115						120					125			
Ile	Ile	Asp	Ala	Val	Ala	Pro	Ile	Gly	Ala	Arg	Val	Ala	Thr	Ala	Ala
	130					135					140				
Ser	Ser	Thr	Trp	Thr	Cys	Ser	Ser	Ser	Val	Ser	Ala	Thr	Arg		
145					150					155					

<210> 2369

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2369

ctgaatggca ggcaggcaga ggccaccaga gccagcccc cgagaagccc tgctgagcca
 60
 aaggggagcg ccctgggacc taaccagag ccccatctca cttcccccg ttctttcaaa
 120
 gtgcctcccc caaccctagt caggacttcg tccatcccag ttcaggaagc acaagaggct
 180
 cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct
 240
 tccacatccg ccccgctcc caggtctacc cagacagggc ccccgagcnc agactgcct
 300
 ggggagctca aggccacagc accagccagc ccaaggcttg gccagtccca gtcccaagca
 360
 gatgaacgag ctgggactcc gctccagcc cctccctgc cccctct
 408

<210> 2370

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2370

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Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser
 1             5             10             15
Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His
          20             25             30
Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg
      35             40             45
Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys
      50             55             60
Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala
65             70             75             80
Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser
          85             90             95
Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg
          100             105             110
Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro
      115             120             125
Pro Ala Pro Pro Leu Pro Pro Pro
      130             135

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<210> 2371

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2371

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gaattcgggtg tgcgatgcga gcctgcagcc tgggagcaga gacaaggagc aaaggcggtg
60
agaggggttg cagggcaccc agttacagct ggagctgcag gggacccatc cctcgagaga
120
ggcaggcact agtcatgagg caagagatgc ctcagaagag gatgctggcc gcagggcaca
180
gcagagaggg agatagcccg gggcactcct caggaccggg cctcagggga cagcaaacaa
240
gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt
300
caggcggggc aaggttttca tgcagcn
327

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<210> 2372

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2372

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Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu
 1             5             10             15
Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile
      20             25             30
Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys

```

```

      35              40              45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
  50              55              60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
  65              70              75              80
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
      85              90              95
Gly Gly Pro Arg Phe Ser Cys Ser
      100

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<210> 2373

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2373

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gaattctgac attcaggaag tcaattgcag aaggtttaac caagttgatt ctgttttacc
60
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
120
cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcacc
180
agaaaatggt accaaagtgt agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
240
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
300
cgctttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
360
tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
420
ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
480
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
540
cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
591

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<210> 2374

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2374

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Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
  1              5              10              15
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
      20              25              30
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
      35              40              45
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
      50              55              60
Asn Glu Asn Met Leu Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
      65              70              75              80
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```

				85						90					95				
Pro	Asp	Ser	Cys	Glu	Met	Asn	Pro	Asn	Thr	Gln	Met	Thr	Gly	Asn	Gln				
			100					105					110						
Leu	Asn	Leu	Lys	Asn	Met	Glu	Thr	Pro	Ser	Thr	Ser	Asn	Val	Ser	Gly				
		115						120				125							
Arg	Val	Leu	Asp	Asn	Ser	Phe	Cys	Ser	Gly	Gln	Glu	Ser	Ser	Thr	Lys				
	130					135					140								
Gly	Met	Pro	Ala	Lys	Ser	Asp	Ser	Ser	Cys	Ser	Met	Glu	Val	Leu	Ala				
145					150					155				160					
Thr	Cys	Leu	Ser	Leu	Trp	Lys													
				165															

<210> 2375

<211> 535

<212> DNA

<213> Homo sapiens

<400> 2375

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ntggccatgt cgttgctcag cagcggcacc ctggacagtt accttgagcg tcacaaacaa
60
ctggacgaga tgcgcatgct gcacttcttc gccctcgacg aagaaaaccc cgccagcatc
120
tataactgcc tgcgcgccgc gcggggcaat gccacgcggg tacgcggggcg gatcaccgcc
180
gacatgtggg aaaacctcaa cgccacctgg ctggaaatgc gcagcatcgc cgccggggggc
240
ctggcccggc atggcatcag ccacttctgt gactgggtca agcagcggtc gcacctgttc
300
cgccggggcaa cctcgggcac catcatgcgc aacgacgctt accggtttat tcgcttgggc
360
acgtttgtcg agcgcgcgga caacacctg cgctgctgg atgcgcgcta cgaaatgttt
420
ggtagagggt cggaagaggt cagcgacctg tcggcacgcy ggtattacca gtggagcgcc
480
ctgctgcggg ccttgctcgc attcgaggcg tataccgaac tgtaccccaa cgcgt
535

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<210> 2376

<211> 178

<212> PRT

<213> Homo sapiens

<400> 2376

Xaa	Ala	Met	Ser	Leu	Leu	Ser	Ser	Gly	Thr	Leu	Asp	Ser	Tyr	Leu	Glu				
1				5					10					15					
Arg	His	Lys	Gln	Leu	Asp	Ala	Met	Arg	Met	Leu	His	Phe	Phe	Ala	Leu				
		20						25					30						
Asp	Glu	Glu	Asn	Pro	Ala	Ser	Ile	Tyr	Asn	Cys	Leu	Arg	Ala	Ala	Arg				
		35					40					45							
Gly	Asn	Ala	His	Ala	Val	Arg	Gly	Arg	Ile	Thr	Ala	Asp	Met	Trp	Glu				
	50					55					60								
Asn	Leu	Asn	Ala	Thr	Trp	Leu	Glu	Met	Arg	Ser	Ile	Ala	Ala	Gly	Gly				
65				70					75					80					
Leu	Ala	Arg	His	Gly	Ile	Ser	His	Phe	Cys	Asp	Trp	Val	Lys	Gln	Arg				

```
<210> 2377
<211> 622
<212> DNA
<213> Homo sapiens
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<400> 2377
acgcgtgaag ggttgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg
60
agcaccagg agatgaaagg aaccaatcct gggtggtcct gcaccaggct tatcaacccc
120
tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt cacccttctg
180
ataaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa
240
atatgtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta
300
aatataatgt tctttgccct gaatgattta agtggcatga taaaactcat gccacagact
360
gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt
420
agagttagaa ttattaatat ttcttatcta ctatttaatt taatcatagt taatgatgag
480
aatttcttaa atttaaagct tctgatgatg ctaaagtgc atttctcatg attccttaaa
540
acaatttttg taaattctat tcctaggacc ttctgcttcc agaaaaatta atgtcttgta
600
ttcttcgtat tggaggagat ct
622

```

```
<210> 2378
<211> 109
<212> PRT
<213> Homo sapiens
```

1731

```

      35              40              45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
  50              55              60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
  65              70              75              80
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
      85              90              95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
      100              105

```

<210> 2379

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2379

```

tcatgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
180
cagtgtctgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgetcac
240
cctgccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
300
cacacacaag caggggaagct gtgcagcagt ggggagaaag ca
342

```

<210> 2380

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2380

```

Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
  1              5              10              15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
      20              25              30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
      35              40              45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
      50              55              60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
      65              70              75              80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
      85              90              95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
      100              105              110
Ser

```

<210> 2381

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2381

gtgcaccctg gccatatgga cgccagcgac gtcggcgctct tgcgtgacgt ggaaccgatc
 60
 ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg
 120
 ccgtcctctt tgacatggac ggaaccctgc tcaacacctt gccggcctgg tgcgtggcat
 180
 ctgagcatct gtggggcact tctctggctg acgtgacag cgccaagggt gacgggggca
 240
 ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat cccagggcca
 300
 ccacgagcgt tttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc
 360
 ccggagctga ccgcctcgtg aagaggctgt caggtcatgt acccatcgct gtggtgtcga
 420
 attccccgac gcgt
 434

<210> 2382

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2382

Met	Val	Thr	Met	Tyr	Pro	Pro	Gln	Gln	Val	Asp	Ala	Val	Leu	Phe	Asp
1				5					10					15	
Met	Asp	Gly	Thr	Leu	Leu	Asn	Thr	Leu	Pro	Ala	Trp	Cys	Val	Ala	Ser
			20					25					30		
Glu	His	Leu	Trp	Gly	Thr	Ser	Leu	Ala	Asp	Ala	Asp	Ser	Ala	Lys	Val
		35					40					45			
Asp	Gly	Gly	Thr	Val	Asp	Asp	Val	Val	Glu	Leu	Tyr	Leu	Arg	Asp	His
	50					55					60				
Pro	Gln	Ala	Asp	Pro	Gln	Ala	Thr	Ile	Glu	Arg	Phe	Met	Asp	Ile	Leu
65					70					75				80	
Asp	Ala	Asn	Leu	Ala	Gly	His	Thr	Glu	Pro	Met	Pro	Gly	Ala	Asp	Arg
			85						90					95	
Leu	Val	Lys	Arg	Leu	Ser	Gly	His	Val	Pro	Ile	Ala	Val	Val	Ser	Asn
			100					105						110	
Ser	Pro	Thr	Arg												
			115												

<210> 2383

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2383

acgcgtgcgt tcagatgagc gccggacgaa actcctcggg cgcttcggca ggcatggatt
 60
 catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg
 120

cagaaaaacgc ccactctccc ttccccaggc gccggccgctc gagtcgtcta cgcaacgcac
 180
 gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc
 240
 gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcattctcg
 300
 ctttcttgat gccaccacc ttgttacata ttctgccatg caaacacct tgtgattttt
 360
 ggaggagtgc aacatgggtat gtgtatgccca ctg
 393

<210> 2384

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2384

Met	Leu	His	Ser	Ala	Lys	Asn	His	Lys	Val	Phe	Cys	Met	Ala	Glu	Tyr
1				5					10					15	
Val	Thr	Arg	Trp	Val	Ala	Ser	Arg	Lys	Thr	Arg	Cys	Ile	Leu	Cys	Asp
			20					25					30		
Asn	Pro	His	Ser	Val	His	Leu	Ile	Phe	Arg	Ala	Asp	Ile	Glu	His	Ala
			35				40					45			
Glu	Pro	Ile	Arg	Val	Arg	Lys	Trp	Gly	Tyr	Glu	Lys	Val	Thr	Tyr	Val
			50			55					60				
Asp	Val	Arg	Cys	Val	Asp	Asp	Ser	Thr	Ala	Gly	Ala	Trp	Gly	Arg	Glu
65					70					75				80	
Ser	Gly	Arg	Phe	Leu	Pro	His	Pro	Arg	Arg	Ile	Ala	Thr	Arg	Arg	Arg
			85					90					95		
Ser	Cys	Ser	Lys	Ala	Arg	Ala	Asp	Met	Asn	Pro	Cys	Leu	Pro	Lys	Arg
			100					105					110		
Pro	Arg	Ser	Phe	Val	Arg	Arg	Ser	Ser	Glu	Arg	Thr	Arg			
			115				120					125			

<210> 2385

<211> 347

<212> DNA

<213> Homo sapiens

<400> 2385

acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggttat
 60
 gcactgtgct gtggactctt gttgtggggt cctaggctctg cccagcattt tggggttcac
 120
 cccgtgaccc tctacgggtt tccatgcccc cagcaccacg tccatcatca tttctggggt
 180
 cccctcacct cagagagcct gcttcctatg actgcgtggg ccagctggag aaggacgacc
 240
 caagaccct caagtttctg tgcctgacc ccaagcatag gctgagtgc tccctggggc
 300
 caaggcctt tacgcactac tctctggggc cactgtctg cactctt
 347

<210> 2386

<211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2386
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu
 1 5 10 15
 Cys Cys Gly Leu Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly
 20 25 30
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val
 35 40 45
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met
 50 55 60
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe
 65 70 75 80
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly
 85 90 95
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu
 100 105

<210> 2387
 <211> 715
 <212> DNA
 <213> Homo sapiens

<400> 2387
 ncggcgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccg
 60
 cgccggagac agctgccgcc gcatagtaat caccgcggg ctgggtgcgc gggggctccc
 120
 cgctacctgc gcgcctgctg ctcccaccac gcggcaccga cccgggcgcg cccccggccc
 180
 ctgtccgcag cccacagcca caccgcgcac cctacaccct cttgctgcct ctgctgggga
 240
 gctcaccccc tccactcgca cagtgcgctg cggcccgggg tgtgggaggt cccgggactt
 300
 ggggtgtgag tgccgtgtgtg ggggtagggg caggtgtccg cttgtgcgca tatgggcatg
 360
 agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca
 420
 cgtgtgtggg cccaaataga tgctgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg
 480
 tgtgcctgtg tgcccgatt tgagtgtta caggaatgtg ggtggtgagt acccgatatg
 540
 ggggtgatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta
 600
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt
 660
 gtttagggtt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag
 715

<210> 2388
 <211> 58
 <212> PRT

<213> Homo sapiens

<400> 2388

```

Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1           5           10           15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
           20           25           30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
           35           40           45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
           50           55

```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```

ntcaccctgc cgccgaagg ttgctcgtac cgcattggcca tcgtcaccat gaagaagtcg
60
tatccggggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagtccatg
120
tataccaagt tcgttatcgt caccgacgac gatataacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggatgatgat cgataacacg
240
ccgatcgact acctcgactt cgctcgcggt gtgtccggcc tgggttcgaa gatggggctc
300
gatccacgcg acaaatggcc cggccacacc acccgn
336

```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```

Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1           5           10           15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
           20           25           30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
           35           40           45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
           50           55           60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
           65           70           75           80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
           85           90           95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
           100          105          110

```

<210> 2391

<211> 388

<212> DNA

<213> Homo sapiens

<400> 2391

gtcgactaac ctgcgtacag cgcgccacct acgtttagtc gcgaagcgtg tcggctccat
60
gttcattccg gagctacacc atgaataaag tactacctga tccacccatc gatcccgcaa
120
aagaccggt cgctttcaac cgcgccatcg accattacct gcctaccag ggcttccact
180
gcgtcaacga agacctgagt ttgaagacg ccctgctcta caccgccagc ctgctcgaca
240
gtgcctctgc cagggcgtg gattgcggtg agctgctgca aagccctgaa cgggcgaaga
300
tcttgccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttccccatcg
360
agtgcctgac cgcaccaaag ccctgcct
388

<210> 2392

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2392

Met	Asn	Lys	Val	Leu	Pro	Asp	Pro	Pro	Ile	Asp	Pro	Ala	Lys	Asp	Arg
1			5						10				15		
Val	Ala	Phe	Asn	Arg	Ala	Ile	Asp	His	Tyr	Leu	Pro	Thr	Gln	Gly	Phe
			20					25					30		
His	Cys	Val	Asn	Glu	Asp	Leu	Ser	Phe	Glu	Asp	Ala	Leu	Leu	Tyr	Thr
			35				40					45			
Ala	Ser	Leu	Leu	Asp	Ser	Ala	Ser	Ala	Thr	Ala	Leu	Asp	Cys	Gly	Glu
			50				55				60				
Leu	Leu	Gln	Ser	Pro	Glu	Arg	Ala	Lys	Ile	Leu	Ala	Val	Trp	His	Leu
					70				75					80	
Leu	Glu	Ile	Ala	Lys	Thr	Thr	Val	Asp	Arg	Phe	Pro	Ile	Glu	Cys	Leu
				85				90						95	
Thr	Ala	Pro	Lys	Pro	Cys										
															100

<210> 2393

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2393

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgtc tgagtcgggc
60
atggtcaccg accccatcac tgcgcgcccg gatatgacca tcggggaagt agacgcgtg
120
tgcgcgccgt tccgcctc cggcctgccg gtggtagacg aggacggcac cctgatgggc
180
atttgacca cccgcgatat gcgcttcgag cctgactttg accgcaaggt cagcgaggtc
240

atgacggcta tgccgcttgt tgttgcgcgc gaggggtgtat ctaagaagga agccctcgaa
 300
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgctg atgcggataa taagctcacc
 360
 ggcctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g
 411

<210> 2394

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2394

Asn	Leu	Ser	Thr	Glu	Asp	Gln	Ala	Glu	Gln	Val	Glu	Ile	Val	Lys	Arg
1				5				10						15	
Ser	Glu	Ser	Gly	Met	Val	Thr	Asp	Pro	Ile	Thr	Ala	Arg	Pro	Asp	Met
			20					25					30		
Thr	Ile	Gly	Glu	Val	Asp	Ala	Leu	Cys	Ala	Arg	Phe	Arg	Ile	Ser	Gly
		35					40					45			
Leu	Pro	Val	Val	Asp	Glu	Asp	Gly	Thr	Leu	Met	Gly	Ile	Cys	Thr	Thr
	50					55					60				
Arg	Asp	Met	Arg	Phe	Glu	Pro	Asp	Phe	Asp	Arg	Lys	Val	Ser	Glu	Val
65					70				75					80	
Met	Thr	Ala	Met	Pro	Leu	Val	Val	Ala	Arg	Glu	Gly	Val	Ser	Lys	Lys
			85					90					95		
Glu	Ala	Leu	Glu	Leu	Leu	Ser	Ala	Asn	Lys	Val	Glu	Lys	Leu	Pro	Ile
		100						105					110		
Val	Asp	Ala	Asp	Asn	Lys	Leu	Thr	Gly	Leu	Ile	Thr	Val	Lys	Asp	Phe
	115					120						125			
Val	Lys	Thr	Glu	Gln	Tyr	Pro	Asn	Ala							
	130					135									

<210> 2395

<211> 362

<212> DNA

<213> Homo sapiens

<400> 2395

aagctttcag aggagtttgc taaagtgtta aggatttgca tattttcaac tttagtcata
 60
 tctaagtgcc ccaataaaaac agcgcggcgc attgggggct ggctttcatc aacaactaac
 120
 ttagcaatat taatctgacc ttttctggt gattgggcat ttagtaataa tgcggggcca
 180
 atatcatcat actttccaaa tatttttgat ttttagaca tcaactgaag ttgtgaccat
 240
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt
 300
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc
 360
 gt
 362

<210> 2396

<211> 117
 <212> PRT
 <213> Homo sapiens

<400> 2396
 Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro
 1 5 10 15
 Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His
 20 25 30
 Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys
 35 40 45
 Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu
 50 55 60
 Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val
 65 70 75 80
 Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His
 85 90 95
 Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala
 100 105 110
 Asn Ser Ser Glu Ser
 115

<210> 2397
 <211> 449
 <212> DNA
 <213> Homo sapiens

<400> 2397
 nacagcacac tccgcctcct ccgacgatca tagctttcac gtcggacatg atcccccgcc
 60
 tagtgtacta ctggctcttc tccgtccctc cctacgggga ccacacttcc tacaccatgg
 120
 aagggtacat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaagca
 180
 agggaaaccc gtactctgac ctgggtaacc ataccacatg caggatatcg gatttccgat
 240
 acccacctgg acacccccag gagtataaac acaacatcta ctattggcat gtgattgcag
 300
 ccaagctggc ttttatcatt gtcattggagc acgtcatcta ctctgtgaaa tttttcattt
 360
 catatgcaat tcccgatgta tcaaagcgca caaagagcaa gatccagaga gaaaaatacc
 420
 taacccaaaa gcttcttcat gagaatcac
 449

<210> 2398
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 2398
 Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro
 1 5 10 15
 Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

20 25 30
 Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val
 35 40 45
 Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr
 50 55 60
 Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met
 65 70 75

<210> 2399

<211> 344

<212> DNA

<213> Homo sapiens

<400> 2399

acgcgtcatg cttcacgaaa cgggtcacgc gcttcattac caagcagctg gcaaacacaa
 60
 cttgtatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca
 120
 gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaag aacaggaact
 180
 agtcaaacc tttgctggtc cggccaggct tggaggggtt cgaaaaccta caacgccaca
 240
 aaacggttcc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat
 300
 accgtatggc ttgagatgcg acacacgctc ggggtggatt ggtc
 344

<210> 2400

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2400

Met Leu His Glu Thr Gly His Ala Leu His Tyr Gln Ala Ala Gly Lys
 1 5 10 15
 His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe
 20 25 30
 Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser
 35 40 45
 Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly
 50 55 60
 Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly
 65 70 75 80
 Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn
 85 90 95
 Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly
 100 105 110

<210> 2401

<211> 479

<212> DNA

<213> Homo sapiens

<400> 2401

nntaccgagg taaaactcga tagcctcggt gtcaccgacc agatgcgctc tgggcgctgc
 60
 tggatgtttg ccgcgctcaa cgtattccgc caccgcgagg ccaaggagct caacatcgat
 120
 gactttgagt ttctctttac ctacctgcag tacttcgaca aactagagcg cgccaacttc
 180
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg
 240
 gctacttccc tcgagctcac aggcgacgac ggccgctggt ggtcattttt caccaacctc
 300
 gtggacaagt acggcgagct cccggccgag gtcatgcctg aggtgcactc gtccggccac
 360
 accgaccaga tgaatcgga tatcgccacc atcatccgcc gcgcgcgca ccgtgcggtg
 420
 gaaggcgagg gggatcgagg gggcatcgtc aagcaagccc gccccgatat ccaacgcgt
 479

<210> 2402

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2402

Xaa	Thr	Glu	Val	Lys	Leu	Asp	Ser	Leu	Gly	Val	Thr	Asp	Gln	Met	Arg
1				5					10					15	
Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20					25					30		
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35					40					45			
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
	50				55					60					
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65				70					75				80		
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
			85				90					95			
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
		100					105					110			
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
		115				120					125				
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
	130				135				140						
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145				150					155						

<210> 2403

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2403

ntcataaacg gcgataaacc gctggactcg tctgcggttc acccggaagc ctaccgctg
 60
 gtgcagcgta ttgccgccga gaccggccgt gatatccgtt cgctgatcgg tgacgccg
 120

ttcctcaagc gcctggaccc gaagaagtac accgacgaaa ccttcgggtgt gccgaccatc
180
accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtcccga gttcaagacc
240
gccgagttcc aggacgggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa
300
ggcgtggtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcacaggac
360
ggtttggtgc acatctctgc actttcg
387

<210> 2404

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2404

Xaa	Met	Asn	Gly	Asp	Asn	Pro	Leu	Asp	Ser	Ser	Ala	Val	His	Pro	Glu
1			5					10						15	
Ala	Tyr	Pro	Leu	Val	Gln	Arg	Ile	Ala	Ala	Glu	Thr	Gly	Arg	Asp	Ile
		20					25					30			
Arg	Ser	Leu	Ile	Gly	Asp	Ala	Ala	Phe	Leu	Lys	Arg	Leu	Asp	Pro	Lys
	35					40					45				
Lys	Tyr	Thr	Asp	Glu	Thr	Phe	Gly	Val	Pro	Thr	Ile	Thr	Asp	Ile	Leu
	50				55			60							
Gln	Glu	Leu	Glu	Lys	Pro	Gly	Arg	Asp	Pro	Arg	Pro	Glu	Phe	Lys	Thr
65				70				75				80			
Ala	Glu	Phe	Gln	Asp	Gly	Val	Glu	Asp	Leu	Lys	Asp	Leu	Gln	Pro	Gly
			85					90				95			
Met	Ile	Leu	Glu	Gly	Val	Val	Thr	Asn	Val	Thr	Asn	Phe	Gly	Ala	Phe
	100						105				110				
Val	Asp	Ile	Gly	Val	His	Gln	Asp	Gly	Leu	Val	His	Ile	Ser	Ala	Leu
	115					120					125				

Ser

<210> 2405

<211> 859

<212> DNA

<213> Homo sapiens

<400> 2405

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60
aaattaaatg gaataatttg ctttatgaga agctcaccat tggggtcatt cttatttttt
120
ctcactccac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag
180
ccttcacttc tccctggca atgctggcc acctgacacc tggcctccct cctctttcca
240
gcaatcctgg taccaacgaa tggetcacca ccaccacccc caatgcccag accgcagacc
300
tgcattcttc ccatctcaca gccccaaatc caaacgttta ttcattctac ctcccatcct
360

actcttcacg aatttcttcc accgtagact ctggttaatt ggactgactg aagcccagg
 420
 gtcagtttct gtcttaagag cgctccaggt ggctgcaccc tgtgccaga gccaggcccc
 480
 ctgctatagg ctgctgcac tccccctgca ggtgctgggg acaccgcaac cctctctctg
 540
 gggacaccta cttgcctttg caggccctcg ggggtcactt ctcccaggaa gccgectctg
 600
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg
 660
 tccactgtct tcaccaatta caccatgagc tccacagact ccaggaccat ggcttctacc
 720
 tctcagttcc cagtgtagc tatggggccc agcacacagg gaacagcagt tcaattacc
 780
 agttcactga agggcagacc tgggatcata caggagcaa ggaagcttga gccccttcag
 840
 gagaagggga agaacgcgt
 859

<210> 2406

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2406

Met	Asp	Arg	His	Leu	Val	Ser	Leu	His	Leu	Ser	Pro	Gly	Asn	Ala	Trp
1				5					10					15	
Pro	Pro	Asp	Thr	Trp	Pro	Pro	Ser	Ser	Phe	Gln	Gln	Ser	Trp	Tyr	Gln
			20					25					30		
Arg	Met	Ala	His	His	His	Pro	Pro	Gln	Cys	Pro	Asp	Arg	Arg	Pro	Ala
		35					40					45			
Phe	Leu	Pro	Ser	His	Ser	Pro	Lys	Ser	Lys	Pro	Leu	Phe	Ile	Leu	Pro
	50					55					60				
Pro	Ile	Leu	Leu	Leu	Thr	Asn	Phe	Phe	His	Arg	Arg	Leu	Trp	Leu	Ile
65					70					75				80	
Gly	Leu	Thr	Glu	Ala	Gln	Gly	Ser	Val	Ser	Val	Leu	Arg	Ala	Leu	Gln
			85					90						95	
Val	Ala	Ala	Pro	Cys	Ala	Gln	Ser	Gln	Ala	Pro	Cys	Tyr	Arg	Leu	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Gln	Val	Leu	Gly	Thr	Pro	Gln	Pro	Ser	Ser	Trp	Gly
		115					120					125			
His	Leu	Leu	Ala	Phe	Ala	Gly	Pro	Arg	Gly	Ser	Leu	Leu	Pro	Gly	Ser
	130					135					140				
Arg	Leu	Trp	Val	Arg											
145															

<210> 2407

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2407

nacgcgtggg ttatcttcag catgggtgatc gcgattgggt tagccgttat ggctgcggtc
 60

gtattcatcg agcaaggcca gcgacgtatc ccggtgcagt acgccaagcg gatggtggg
 120
 cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt
 180
 atccccgtca tctttgcctc gtcgacgtc taccttcggg tgctctacgc aactttccgg
 240
 ccgcagacgt ccgcggcaaa gtggatcggt cactacttca cgcgcggtga ccatccggtg
 300
 tac
 303

<210> 2408

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2408

Xaa	Ala	Trp	Phe	Ile	Phe	Ser	Met	Val	Ile	Ala	Ile	Gly	Leu	Ala	Val
1			5					10				15			
Met	Ala	Ala	Val	Val	Phe	Ile	Glu	Gln	Gly	Gln	Arg	Arg	Ile	Pro	Val
		20					25					30			
Gln	Tyr	Ala	Lys	Arg	Met	Val	Gly	Arg	Arg	Met	Phe	Gly	Gly	Ser	Thr
		35				40				45					
Thr	Tyr	Ile	Pro	Leu	Lys	Val	Asn	Gln	Ser	Gly	Val	Ile	Pro	Val	Ile
	50				55					60					
Phe	Ala	Ser	Ser	Ile	Leu	Tyr	Leu	Pro	Val	Leu	Tyr	Ala	Thr	Phe	Arg
65				70				75				80			
Pro	Gln	Thr	Ser	Ala	Ala	Lys	Trp	Ile	Gly	His	Tyr	Phe	Thr	Arg	Gly
			85					90				95			
Asp	His	Pro	Val	Tyr											
			100												

<210> 2409

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2409

ccatgggttc aagccccat tgtgtcagcc cagagagcaa ctggagacc tctgacacca
 60
 cctccccgcc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt
 120
 cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc
 180
 tcggcccgac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccaggtggg
 240
 ccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga
 300
 gggacatgag tgtcagtgtg gg
 322

<210> 2410

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2410

```

Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1              5              10              15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
      20              25              30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
      35              40              45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
 50              55              60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
65              70              75              80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
      85              90              95
Asp Leu Val Arg Asp Met Ser Val Ser Val
      100              105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

```

ccatgggctg ggtgctggag acacagagatc aggcaggccc tgcccctggg gctcattcta
60
gggtctgcgg cagacagggg gacagagggg gctgtgagag cctgaggct gagtggcttt
120
ctggggaagc accatcccta gggacctccg cgttcgggtca gtggccgctg ctgtcgggtg
180
gcagagcaga ggctggggcg agagtgggtc gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggct tgtggctggc aagagggtgg catgcacgtc gctgaaaggg
300
aggcctgggc cagaggcctg ggtgtgggga cgctgagga gactgtacag tgtggagtcg
360
ggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1              5              10              15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
      20              25              30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
      35              40              45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
 50              55              60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

65		70		75		80									
Gly	Gly	Trp	Arg	Leu	Ala	Cys	Gly	Trp	Gln	Glu	Gly	Gly	Met	His	Val
			85					90					95		
Ala	Glu	Arg	Gln	Ala	Trp	Ala	Arg	Gly	Leu	Gly	Val	Gly	Thr	Pro	Glu
		100						105					110		
Glu	Thr	Val	Gln	Cys	Gly	Val	Gly	Gly	Ala	Ala					
		115						120							

<210> 2413

<211> 784

<212> DNA

<213> Homo sapiens

<400> 2413

```

ccccgggagag ttgggcgggg caggggtggt catggcatac tcgggattgt gtcatttggg
60
gtggctggat ttagggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct
120
taggctcact gaggaattgg ggttcttctt gaagagcatg gagcccttgg aggacctcca
180
cagcaggcag agagacggca gcctcctggg atctgattgc ccagccccac ttacacaggt
240
ggctgagggtg agctcttccc atggagtgca tccttctga tcagcctgag gagagcaggg
300
ccccaccatc ctgcacctgg tgcagaaaaa cctgtgaag ctgcactaca gaaagacacc
360
accaggtggc aggcctggag attgcatgga ggccccgccc cccccaacca attctttgat
420
aatagcacag tgttgaagag agggggccat aaaagactga atccctgttc atgccaggct
480
ggctctgccc aacatatatg agactgcaag ttctgccact gtgggctgtg taccacaag
540
ccacagggtc ctctgaacct gtgaatcagg tcttgggagc tattcgagca ggctggattt
600
tctcctctgc ctggggggac ctgagagtaa gttacagact tcatgaccct tcacccaaa
660
acacttgagt atgtatcacc taagaacaag ggcattctcc tgtagaacca caatgcaatt
720
tgcaagtcca ggaaatttaa ctgatacaat actattatct aattacggag agaagacaac
780
gcgt
784

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<210> 2414

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2414

Met	Lys	Ser	Val	Thr	Tyr	Ser	Gln	Val	Pro	Arg	Gly	Arg	Gly	Glu	Asn
1				5					10					15	
Pro	Ala	Cys	Ser	Asn	Ser	Ser	Gln	Asp	Leu	Ile	His	Arg	Phe	Arg	Gly
		20					25				30				
Thr	Cys	Gly	Leu	Trp	Val	His	Ser	Pro	Gln	Trp	Gln	Asn	Leu	Gln	Ser

	35		40		45	
His	Ile	Cys	Trp	Ala	Glu	Pro
	50		55		60	
Leu	Trp	Pro	Pro	Leu	Phe	Asn
65			70		75	
Gly	Gly	Ala	Gly	Pro	Pro	Cys
			85		90	
Ser	Phe	Cys	Ser	Ala	Ala	Ser
			100		105	
Trp	Trp	Gly	Pro	Ala	Leu	Leu
			115		120	
Gly	Lys	Ser	Ser	Pro	Gln	Pro
	130				135	

<210> 2415

<211> 2164

<212> DNA

<213> Homo sapiens

<400> 2415

ctctgtgccag cgtcctcgcg ggtctgaatg gaagggtcga ggtcgtcgtc ggccggcgagc
 60
 agatcctgaa gccagaactc caccctggcg cccgcgccat gcggcgaggag aggtgcgggc
 120
 ccccccaccc gcgtcgccgc catggagggtg ctgcggcgct cttcggtctt cgtgcgagg
 180
 atcatggacg cttttgatcg ctggcccaca gacaaggagc tgggtggcca ggctaaagca
 240
 ctaggccggg agtacgtgca cgcgcggtt ttgcgcgcg gcctctcctg gagcgctcca
 300
 gagcgtgcct cgctgcccc tggaggacgc ctggctgagg tgtgcgcggt gctgctgcgc
 360
 ctgggcgatg agctggagat gatccggccc agcgtctacc gcaacgtggc gcgtcagctg
 420
 cacatctccc tgcagtctga gcctgtggtg accgatgcgt tcttggccgt ggctggccac
 480
 atcttctctg caggcatcac gtggggcaag gtggtgtccc tgtatgcggt ggccgcgggg
 540
 ctggccgtgg actgtgtgag gcaggcccag cctgccatgg tccacgcctt cgtggactgc
 600
 ctgggggagt tegtgcgcaa gaccctggca acctggctgc ggagacgcgg cggatggact
 660
 gatgtcctca agtgtgtggt cagcacagac cctggcctcc gctccactg gctggtgggt
 720
 gcactctgca gcttcggccg ctctctgaag gctgccttct tegtgtgtgt gccagagaga
 780
 tgagctgccc acctggcagt ggccgcagcc tggccctctg ggcccaacgc aggaggccct
 840
 cagcacccga acacatcttc ctctctccca cccgagcctg gagcactcta acctcgga
 900
 cccctaagc ccgttcttc cgcagacca ggccctccgg aaggggtgagt ggggaggggc
 960
 tttcctgagc ctggagctgg gctttggggc agcctgcgac cctccccgct tgtgtccctt
 1020

ctctgtgat ctctgtgtt tcccttttct ttctggggcc aggaagtcag ggtcaactcc
 1080
 caggectcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc
 1140
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca
 1200
 cctgagcccc tgggtaaggg gcccggaaca cctgctctca cctgagcccc aggtgaaggg
 1260
 gcccggaaca cctgctctca cctgagcccc aggtgaaggg gcccggaaca cttgctctca
 1320
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 1380
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 1440
 gtgaccttg cctggctgaa gctggaagag ctgtggggac tcagcctgta aacagagcgt
 1500
 aaggttcaca tgctggttgc ttaatccgtt tctggaggaa gagtatgaca cccacttgtg
 1560
 atggggctct tgtgcggtgg ggaccggggc cggcgggctc caggccagca cacctaacc
 1620
 atggatgtgg aacctacggc cgagaaggaa tgttgcatga gtcggatccc agtccattgt
 1680
 cagtggaggg tgagggtgac cccatctgct atttttgtgc tcatcctcat acaaccattt
 1740
 ggggatgtgc ctattagggc tccgtaagaa ctcatatgcc tgggaagccc agccctcag
 1800
 gtgccccac acacagcctt cccttgacgc ctacatttct aggcacatgt gaggcattt
 1860
 tcttgagcc ccgagccagc cctgtccctc cccagtgcag catggcactc aggagataca
 1920
 ggctggacat ggggcagtcg ttctggggag gcctggccta gcagccaccc acctgagccc
 1980
 tcccgccag gcttcgtgct ggggtggggc atgtgccagg acaggagggg cccggcgga
 2040
 agccagcccc ggactcatcg tgacattgag atcccactgg agggtagggg tggtaataaa
 2100
 cttctccaaa cgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 2160
 aaaa
 2164

<210> 2416

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2416

Met	Glu	Val	Leu	Arg	Arg	Ser	Ser	Val	Phe	Ala	Ala	Glu	Ile	Met	Asp
1				5					10					15	
Ala	Phe	Asp	Arg	Trp	Pro	Thr	Asp	Lys	Glu	Leu	Val	Ala	Gln	Ala	Lys
			20					25				30			
Ala	Leu	Gly	Arg	Glu	Tyr	Val	His	Ala	Arg	Leu	Leu	Arg	Ala	Gly	Leu
		35					40					45			
Ser	Trp	Ser	Ala	Pro	Glu	Arg	Ala	Ser	Pro	Ala	Pro	Gly	Gly	Arg	Leu

50	55	60
Ala Glu Val Cys Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met		
65	70	75
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser		80
	85	90
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly		95
	100	105
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr		110
	115	120
Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro		125
	130	135
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys		140
145	150	155
Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu		160
	165	170
Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val		175
	180	185
Ala Ala Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val		190
	195	200
Leu Leu Pro Glu Arg		205
210		

<210> 2417

<211> 615

<212> DNA

<213> Homo sapiens

<400> 2417

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60

aagctgattt gattttcata ttgatactc aatagttaag tgaaggacta gttattgctc

120

cagttgttag ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt

180

acgttttttc acaactgtga tccacgccac agttgcaa atcaacata gaaaaattaa

240

ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga

300

gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgaggagaa

360

aaatccacaa atccttttgc tttcaaacat tatgatgcta atcaagtaat tttaggtaaa

420

actatggctg aacatttacg cttaacggtg tgttattggc ataccttttg ctggaatggg

480

aatgatatgt ttgggctagg ttctttggaa cgaagtggc agaaaaattc aaatttgctt

540

gctggcgag aacaaaaagc cgatattgct ttgagtttt tgaataagtt aggcgtgcct

600

tattattggt ttcac

615

<210> 2418

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2418

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Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
          20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
          35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
          50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
          85           90           95
Tyr Tyr Cys Phe His
          100

```

<210> 2419

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2419

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aaattttcag aagtcctggt gttgcgcggt caaacaggga ccgaggaggg acgaccgcct
60
ccccgtgacg ctgcttcttc ttcctgcctg cagctgaggg gtctgttttg tgctgcttcc
120
gtccttctct cacgtacaca gggggcagct tagcctctgg gatgggagtg gcttcataca
180
tgagacacat gcccgagtcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccat cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgcgt
318

```

<210> 2420

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2420

```

Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
          20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
          35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
          50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

```

Lys Ile

85

90

95

<210> 2421

<211> 420

<212> DNA

<213> Homo sapiens

<400> 2421

nnacgcgtgg tggtctttat ggtcgttttc ggtctctgtc tgctgctggc aaaactgctg
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tactggttgt ttgacagtgc agggcttgtg cacagacgtg agccacaggg cagcacaacg
120
ctgtcgcaag tctgagtagg gattatcatg acggatacaa cttcagcccc gcgttacgcg
180
ctgcgtgggc tacagcttat tggctggcgt gacatgcaac acgcgctgga tttcctgttc
240
gcggacgggc agatgaaatc gggcacgctg gtggccatca acgcagaaaa gatgctggcg
300
gttgaagata atgcggaagt gaaaagcctg attgaagccg cggagtttaa ataccggcc
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ggatttagcg tagtgcgttc aattcgtaaa aagttcccc acgctggagt gtgctcgca
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<210> 2422

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2422

Met	Thr	Asp	Thr	Thr	Ser	Ala	Pro	Arg	Tyr	Ala	Leu	Arg	Gly	Leu	Gln
1				5					10					15	
Leu	Ile	Gly	Trp	Arg	Asp	Met	Gln	His	Ala	Leu	Asp	Phe	Leu	Phe	Ala
		20						25					30		
Asp	Gly	Gln	Met	Lys	Ser	Gly	Thr	Leu	Val	Ala	Ile	Asn	Ala	Glu	Lys
		35					40					45			
Met	Leu	Ala	Val	Glu	Asp	Asn	Ala	Glu	Val	Lys	Ser	Leu	Ile	Glu	Ala
		50				55				60					
Ala	Glu	Phe	Lys	Tyr	Pro	Ala	Gly	Ile	Ser	Val	Val	Arg	Ser	Ile	Arg
65				70					75					80	
Lys	Lys	Phe	Pro	His	Ala	Gly	Val	Cys	Ser	Arg					
				85					90						

<210> 2423

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2423

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120

gaatgcgcag actgcaagtc aaagggctct cgatgggcaa gtgtgaatct aggtatcttt
 180
 atatgcatga catgttctgg cattcataga agcctggggg tgcacatata taaggtaaga
 240
 tctgccaccc tggatacatg gctgccagag caagttgcat ttattcaatc aatgggaaac
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 gaaaaagcaa atagctattg ggaagcagag ctgcctccta actacgatag ggttgaata
 360
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 371

<210> 2424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2424

Met	Asn	Glu	Lys	Ala	Ser	Val	Ser	Lys	Glu	Leu	Asn	Ala	Lys	His	Lys
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Lys	Ile	Leu	Glu	Gly	Leu	Leu	Arg	His	Pro	Glu	Asn	Arg	Glu	Cys	Ala
			20					25					30		
Asp	Cys	Lys	Ser	Lys	Gly	Pro	Arg	Trp	Ala	Ser	Val	Asn	Leu	Gly	Ile
		35					40					45			
Phe	Ile	Cys	Met	Thr	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly	Val	His
	50					55				60					
Ile	Ser	Lys	Val	Arg	Ser	Ala	Thr	Leu	Asp	Thr	Trp	Leu	Pro	Glu	Gln
65				70					75					80	
Val	Ala	Phe	Ile	Gln	Ser	Met	Gly	Asn	Glu	Lys	Ala	Asn	Ser	Tyr	Trp
			85					90					95		
Glu	Ala	Glu	Leu	Pro	Pro	Asn	Tyr	Asp	Arg	Val	Gly	Ile	Glu	Asn	Leu
			100					105					110		

<210> 2425

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2425

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 120
 acctcccggc ctgcacgggg gtctcggtttc accgcccacg cccagcccga ggaacgcccc
 180
 cgctgcaagg aagccggcat gaacgactgc ctgttcaagc ccatcagcct gaccaccctc
 240
 aaccagaaac tcgccgacgt cagccgcgcg ccgcgtccga gccaggccgc cttcagcctc
 300
 gacggcctgc acgccctgac cgggggcgag ccgctgctga tgcgtcgctt gatcgacgag
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 411

<210> 2426

<211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2426
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 Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu
 20 25 30
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe
 35 40 45
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu
 50 55 60
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu
 65 70 75 80
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala
 85 90 95
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu
 100 105 110
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala
 115 120 125
 Arg Glu Ala Leu Leu Gly Leu Pro Ile
 130 135

<210> 2427
 <211> 293
 <212> DNA
 <213> Homo sapiens

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 tggagcgtaa aatgttgcag agcccagcta gaagccagga ggagcagaca cctgctgat
 120
 ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtcccag tgcacccgat
 180
 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac
 240
 aactcatgac ctgcatcctt aatatccagt gacttcatct ccccttcacg cgt
 293

<210> 2428
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2428
 His Asn Lys Gly Leu Gly Ile Leu Val Pro Cys Ala Ile Xaa Ala Ala
 1 5 10 15
 Phe Leu Leu Ile Trp Ser Val Lys Cys Cys Arg Ala Gln Leu Glu Ala
 20 25 30
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys
 35 40 45
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

50 55 60
 Asn Val Pro Leu Ser Gly Lys Val
 65 70

<210> 2429

<211> 428

<212> DNA

<213> Homo sapiens

<400> 2429

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 120

gatgtcctgc tcaatgggggt agagacgtcg accgggtccgc agccgggtgc gcttgctttg
 180

ctggaacagg ccgtacatga gctggatggc actggggatg ctgatacctcg cgccgctgag
 240

ttggctgagc gcgcccgcga gatgtcgatg gacctcactg acctcgctgc ttcggctcgt
 300

ggccatgagg ctcgggctga agctgatccg caacggcttg aggaattggg gggtcgtttg
 360

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 420

actgcggc

428

<210> 2430

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2430

Ser Arg Arg Val Gly Glu Val Asp Ala Val Asp Pro Lys Pro His Glu
 1 5 10 15

Asp Asp Asp Leu Ile Ala Glu Met Ala Gly Leu Gln Ala Ala Gln Ser
 20 25 30

Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu
 35 40 45

Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala
 50 55 60

Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu
 65 70 75 80

Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala
 85 90 95

Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg
 100 105 110

Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg
 115 120 125

Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala
 130 135 140

<210> 2431

<211> 409

<212> DNA

<213> Homo sapiens

<400> 2431

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120
aatggcgagg taacaatttc tggggcaaaa aatgccgcat taccaatcct atttgcctat
180
ttattatctg aggggtgatat caatttaagc aatgtaccgc ttttaaaga tattgccacc
240
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300
attaatgcga aagaagttaa gaactatact gcttcttatg aattagttag aagtatgcgt
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409

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<210> 2432

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2432

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Met Gly Gln Phe Ile Ile Gln Gly Gly Cys Gln Leu Asn Gly Glu Val
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Thr Ile Ser Gly Ala Lys Asn Ala Ala Leu Pro Ile Leu Phe Ala Thr
20           25           30
Leu Leu Ser Glu Gly Asp Ile Asn Leu Ser Asn Val Pro Leu Leu Lys
35           40           45
Asp Ile Ala Thr Thr Ile Glu Leu Leu Lys Glu Leu Gly Ala Thr Ala
50           55           60
Thr Gln Thr Gln His Cys Val His Ile Asn Ala Lys Glu Val Lys Asn
65           70           75           80
Tyr Thr Ala Ser Tyr Glu Leu Val Arg Ser Met Arg Ala Ser Ile Leu
85           90           95
Ala Leu Gly Pro Leu Val Ala Arg Phe Gly Glu Ala
100          105

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<210> 2433

<211> 655

<212> DNA

<213> Homo sapiens

<400> 2433

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120
gctctatgat gctcacgtaa caatgaaatc acggaatctc tctctcagaa catttccccg
180
ttgtgaagca gcacgtgact ataatctttt cccaggttta cccctgaagt tcaagtgcaa
240

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tgcccctgca cagcacagag caggggacga taggaggcgt gccttctcca gctgaaccac
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 cgggccagcc gggcgggcag tgggggttgg ggggagggtt gaccattgg tgctgccacg
 360
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 420
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 480
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<210> 2434
 <211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2434
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 20 25 30
 Lys Ser Lys Gly Cys Val Trp Asn Thr Ala Val Thr Glu Lys Val Leu
 35 40 45
 Phe Ala Gln Ser Ala Arg Pro Leu Leu Leu Ser Leu Met Ser Pro Asp
 50 55 60
 Trp Ala Phe Ile Val Pro Cys Thr Glu Ala Ser Leu Ser Pro Arg Ser
 65 70 75 80
 Cys Leu Phe Gly Arg Gly Ser Thr Asn Gly Ser Thr Leu Pro Pro Thr
 85 90 95
 Pro Thr Ala Arg Pro Ala Gly Pro Val Val Gln Leu Glu Lys Ala Arg
 100 105 110
 Leu Leu Ser Ser Pro Ala Leu Cys Cys Ala Gly Ala Leu His Leu Asn
 115 120 125
 Phe Arg Gly Lys Pro Gly Lys Arg Leu
 130 135

<210> 2435
 <211> 401
 <212> DNA
 <213> Homo sapiens

<400> 2435
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 120
 gcagatattg accaagcggc ccagggtgcg atgggcgcca agatgcgcaa tctcgcgag
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 240


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<210> 2436
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<212> PRT
<213> Homo sapiens
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<210> 2437
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<212> DNA
<213> Homo sapiens
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1757

<210> 2438
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2438
 Met Val Glu His Glu Glu Asn Cys Leu Leu Asn Pro Thr Thr Tyr
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 Cys Asp Thr Val Thr Gly Pro Cys Ser Gly Leu Asp Ser Cys Ile Arg
 20 25 30
 Val Leu Asp Gly Asn Arg Trp His Ser Lys Gly Gly Ala Gln Phe Arg
 35 40 45
 Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg
 50 55 60
 Asp Leu Arg Gly Ser Ala Pro Arg Pro Pro Leu His Ile Cys Asp Pro
 65 70 75 80
 Thr His Phe His Pro Ser Ala Thr Phe Lys Phe Gln Ser Phe His Phe
 85 90 95
 Ile Ala Val

<210> 2439
 <211> 4425
 <212> DNA
 <213> Homo sapiens

<400> 2439
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 120
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 240
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 300
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 360
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 420
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 480
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<211> 1306

<212> PRT

<213> Homo sapiens

<400> 2440

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Thr	Asp	Asn	Ile	Lys	Lys	Thr	Leu	His	Lys	Phe	Cys	Gly	Pro	Ser	Pro
			20					25					30		
Val	Val	Phe	Ser	Asp	Val	Asn	Ser	Met	Tyr	Leu	Ser	Ser	Thr	Glu	Pro
		35					40					45			
Pro	Ala	Ala	Ala	Glu	Trp	Ala	Cys	Leu	Leu	Arg	Pro	Leu	Arg	Gly	Arg
	50					55				60					
Glu	Pro	Glu	Gly	Val	Trp	Asn	Leu	Leu	Ser	Ile	Val	Arg	Glu	Met	Phe
65				70					75					80	
Lys	Arg	Arg	Asp	Ser	Asn	Ala	Ala	Pro	Leu	Leu	Glu	Ile	Leu	Thr	Asp
			85					90					95		
Gln	Cys	Leu	Thr	Tyr	Glu	Gln	Ile	Thr	Gly	Trp	Trp	Tyr	Ser	Val	Arg
			100					105					110		
Thr	Ser	Ala	Ser	His	Ser	Ser	Ala	Ser	Gly	His	Thr	Gly	Arg	Ser	Asn
		115					120					125			
Gly	Gln	Ser	Glu	Val	Ala	Ala	His	Ala	Cys	Ala	Ser	Met	Cys	Asp	Glu
	130					135					140				
Met	Val	Thr	Leu	Trp	Arg	Leu	Ala	Val	Leu	Asp	Pro	Ala	Leu	Ser	Pro
145					150					155				160	
Gln	Arg	Arg	Arg	Glu	Leu	Cys	Thr	Gln	Leu	Arg	Gln	Trp	Gln	Leu	Lys
			165					170					175		
Val	Ile	Glu	Asn	Val	Lys	Arg	Gly	Gln	His	Lys	Lys	Thr	Leu	Glu	Arg
			180					185					190		
Leu	Phe	Pro	Gly	Phe	Arg	Pro	Ala	Val	Glu	Ala	Cys	Tyr	Phe	Asn	Trp
		195					200					205			
Glu	Glu	Ala	Tyr	Pro	Leu	Pro	Gly	Val	Thr	Tyr	Ser	Gly	Thr	Asp	Arg
	210					215					220				
Lys	Leu	Ala	Leu	Cys	Trp	Ala	Arg	Ala	Leu	Pro	Ser	Arg	Pro	Gly	Ala
225				230					235					240	
Ser	Arg	Ser	Gly	Gly	Leu	Glu	Glu	Ser	Arg	Asp	Arg	Pro	Arg	Pro	Leu
			245					250					255		
Pro	Thr	Glu	Pro	Ala	Val	Arg	Pro	Lys	Glu	Pro	Gly	Thr	Lys	Arg	Lys

1762

690	695	700
Glu Lys Gly Asp Leu Ala Leu Met Ile Thr Tyr Lys Asp Asp		
705	710	715
Gln Ala Lys Leu Lys Lys Ile Leu Asp Lys Leu Leu Asp Arg Glu Ser		720
	725	730
Gln Thr His Lys Pro Gln Thr Leu Ser Ser Phe Tyr Ser Ser Ser Arg		735
	740	745
Pro Thr Thr Ala Ser Gln Arg Ser Pro Ser Lys His Gly Gly Pro Ser		750
	755	760
Ala Pro Gly Ala Leu Gln Pro Leu Thr Ser Gly Ser Ala Gly Pro Ala		765
	770	775
Gln Pro Gly Ser Val Ala Gly Ala Gly Pro Gly Pro Thr Glu Gly Phe		780
785	790	795
Thr Glu Lys Asn Val Pro Glu Ser Ser Pro His Ser Pro Cys Glu Gly		800
	805	810
Leu Pro Ser Glu Ala Ala Leu Thr Pro Arg Pro Glu Gly Lys Val Pro		815
	820	825
Ser Arg Leu Ala Leu Gly Ser Arg Gly Gly Tyr Asn Gly Arg Gly Trp		830
	835	840
Gly Ser Ser Gly Arg Pro Lys Lys Lys His Thr Gly Met Ala Ser Ile		845
	850	855
Asp Ser Ser Ala Pro Glu Thr Thr Ser Asp Ser Ser Pro Thr Leu Ser		860
865	870	875
Arg Arg Pro Leu Arg Gly Gly Trp Ala Pro Thr Ser Trp Gly Arg Gly		880
	885	890
Gln Asp Ser Asp Ser Ile Ser Ser Ser Ser Ser Asp Ser Leu Gly Ser		895
	900	905
Ser Ser Ser Ser Gly Ser Arg Arg Ala Ser Ala Ser Gly Gly Ala Arg		910
	915	920
Ala Lys Thr Val Glu Val Gly Arg Tyr Lys Gly Arg Arg Pro Glu Ser		925
	930	935
His Ala Pro His Val Pro Asn Gln Pro Ser Glu Ala Ala Ala His Phe		940
945	950	955
Tyr Phe Glu Leu Ala Lys Thr Val Leu Ile Lys Ala Gly Gly Asn Ser		960
	965	970
Ser Thr Ser Ile Phe Thr His Pro Ser Ser Ser Gly Gly His Gln Gly		975
	980	985
Pro His Arg Asn Leu His Leu Cys Ala Phe Glu Ile Gly Leu Tyr Ala		990
	995	1000
Leu Gly Leu His Asn Phe Val Ser Pro Asn Trp Leu Ser Arg Thr Tyr		1005
	1010	1015
Ser Ser His Val Ser Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser		1020
1025	1030	1035
Ala Ala Leu Thr Ile Leu Val Glu Cys Trp Asp Gly His Leu Thr Pro		1040
	1045	1050
Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser		1055
	1060	1065
Asn Met Val Arg Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His		1070
	1075	1080
Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys		1085
	1090	1095
Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu		1100
1105	1110	1115
Glu Ala Ala Lys Gly Gly Gly Val Tyr Pro Glu Val Leu Phe Glu Val		1120

1125 1130 1135
 Ala His Gln Trp Phe Trp Leu Tyr Glu Gln Thr Ala Gly Gly Ser Ser
 1140 1145 1150
 Thr Ala Arg Glu Gly Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala
 1155 1160 1165
 Gly Gly Glu Ala Gly Arg Gly Met Pro Glu Gly Arg Gly Gly Pro Gly
 1170 1175 1180
 Thr Glu Pro Val Thr Val Ala Ala Ala Val Thr Ala Ala Ala Thr
 1185 1190 1195 1200
 Val Val Pro Val Ile Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly
 1205 1210 1215
 Leu Gly His Gly His Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln
 1220 1225 1230
 Pro His Leu Pro Cys Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro
 1235 1240 1245
 Ala His Pro Met Pro His Met Pro Arg Pro Ala Val Phe Pro Val Pro
 1250 1255 1260
 Ser Ser Ala Tyr Pro Gln Val Arg Pro Val Phe Cys Trp Gly Val Arg
 1265 1270 1275 1280
 His Gly Lys Ile Leu Gly Ile His Arg Gly Leu Glu Trp Val Leu Trp
 1285 1290 1295
 Glu Tyr Asn Trp Ser Val Gly Glu Ser Trp
 1300 1305

<210> 2441

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 2441

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 120
 ccatttgtaa ttttggtttt ggtgaacatg cactttgcgt catgcaaatac aggtttctaa
 180
 acattaacaa ccggagagaa atgacatttt ggggcgcgcg gtgactcttg cgtgcctctg
 240
 ctgccccctg gtggcagccc cgagtcactt ccagcagggc cccccaccc caagggccca
 300
 gcctcgggca ggaagggtag aaagccccg cctggtttct gccacgaggt ctcttgga
 360
 tgaggggaac agcacagcga cgtccttgcg tctaaatgc atccccctgt ggccgttttt
 420
 cgccacacag gcttgcaaaa atctctgcgt cactgagcag cattttaacc tcttgaatga
 480
 gatgcctccg accttttgga tctcttttct gcacctctca ggggacaggt cccgtctgta
 540
 cggcgctgcc tacgagaaac ccaagttcat tactgcagcc aaaggaaagg tgcaggcggt
 600
 gggaggctcc tgcaaggtag tgcgtctggc cataagtcct actgccttct cccacctgct
 660
 ggcctgtgcc cagcagttcc ggaagcagac ccaggccag gtgtacagtg aggacatggc
 720

cctgaacata ggctcggaac cagaaggcct gcagggtggaa gagaaggagc gccctgtgca
780
gaggctcagt agcgtcctgg ggcctcctgga ggagcttctg cagcgcctat tccccctgct
840
cagcctctcc aaggccagag tgcagacacc tgcggttgtt gccgattcag ggaagtcgaa
900
gggcaaagac aaggagagga aaacgtccac aggacaacac agcacagtcc agcctgaggt
960
tgccgataag atagtcctgg tcacagacag acatctctg gagctgccac tggaaggtct
1020
ctctgtgttc gatgaaggga caatttcctc tgtgtcacga gaattttctc ttcaaagtct
1080
gtggaatcgc ctccataaag aagagacaga aggtggcgtg aaaaaggagg gaagaagcag
1140
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1200
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1260
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1320
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1380
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1440
gagcttctg tcccatatat tagtggagag attggtcgcc atgaacttgc aagagtgcc
1500
ggtggcagtc ctgctggacc tggcacggtc ctaccagagc ttgaagaggc acatggagag
1560
cgtggagcac aggagatctg ttggccgttg ggaagccaat tggagaaacg gtgcgtctcc
1620
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1740
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1800
tggggcccca gcaattgcct ctgcccttgg ctctgcccct ctgccaaccc atccccacct
1860
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1920
tggtgcagcc tcagccaggg acctcccccc agcgacttcc cgcaaggcag ccgcctggac
1980
ctcgagctct gcctgcctgt gtgcgccatg gggctctgct cggggctgga gctgcgtctc
2040
ttcccggggc caggacaagg gggcctccc cttggcgggc ctggtgctga gttgcttaga
2100
ccagaagact attcagaccg tgagcctgtt tttgatttga gtgttccact aaacaaacaa
2160
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2220
aaaaaaaaa aaaaaaaaaa aaaa
2244

<210> 2442

<211> 168

<212> PRT

<213> Homo sapiens

<400> 2442

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Met Gly Cys Arg Thr Lys Pro Ser Gly Ser Ala Gly Leu Asp Leu Pro
 1           5           10           15
Pro Ile Ser Cys Trp Gly Pro Ser Thr Cys Leu Cys Pro Trp Leu Cys
          20           25           30
Pro Ser Ala Asn Pro Ser Pro Pro Gly Ser His Pro Gln Leu Pro
          35           40           45
Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu
          50           55           60
Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp
65           70           75           80
Leu Glu Leu Cys Leu Pro Val Cys Ala Met Gly Ser Ala Ser Gly Leu
          85           90           95
Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly
          100          105          110
Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu
          115          120          125
Pro Val Phe Asp Leu Ser Val Pro Leu Asn Lys Gln Gln Lys Pro Lys
          130          135          140
Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
145          150          155          160
Lys Lys Lys Lys Lys Lys Lys
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<210> 2443

<211> 361

<212> DNA

<213> Homo sapiens

<400> 2443

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nccgtgcgcg ctatcttgcg tcgtacgccg tccaggaag atgaaaaaat gctacaaacg
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120
gtccatttga cgaaaaacga atttttaatt gtgcagactt tgtttacgca cccaataag
180
atctatacgc gcgatgaaat tatcgaagtc accttcggaa tggattatga ggcctttgac
240
cgtgccattg atacccatat caaaaacatt cgccagaaga ttgaagcgga tccgaaaaac
300
cccgtctata tccgcacggt ttatggtgtc gggatatctgc ccggaggctt tgatgaagct
360
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361

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<210> 2444

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2444

Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys
 1 5 10 15
 Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met
 20 25 30
 Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe
 35 40 45
 Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
 50 55 60
 Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
 65 70 75 80
 Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
 85 90 95
 Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr
 100 105 110
 Leu Pro Gly Gly Phe Asp Glu Ala
 115 120

<210> 2445

<211> 403

<212> DNA

<213> Homo sapiens

<400> 2445

agatctgttg aatgaagcag gtgccactta gacattcact tcaactgactc caaccacaac
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 ctcccccttca tttgatatcc tgctcttggc agaaggatgg agaaagagca tcgcacaaag
 120
 aggaagcatg tttatcctgt tcagattact gcttctgccg ggctgctgct gctgttgggt
 180
 tctgcacatt tgctctttat taagcaaagt tcagagctgg gtgctggcaa gggaatcccc
 240
 tgtattttaca caggtaaacc tgagagccag agggccccc aaaccatcctgg ctgcgagggg
 300
 caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata
 360
 aataaaaaga ggaaagtcce ctttacccaa gaacctgaaa aan
 403

<210> 2446

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2446

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln
 1 5 10 15
 Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Gly Ser Ala His Leu
 20 25 30
 Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro
 35 40 45
 Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
 50 55 60
 Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

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<210> 2447
<211> 744
<212> DNA
<213> Homo sapiens
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<210> 2448
<211> 248
<212> PRT
<213> Homo sapiens
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1768

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65          70          75          80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
      85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100         105         110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115         120         125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130         135         140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
      145         150         155         160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165         170         175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180         185         190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195         200         205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210         215         220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
      225         230         235         240
Ser His Asp Glu Val Arg Val Met
      245

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<210> 2449

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2449

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gtgcactttg ttacagccct ggaacatgaa cacatgcctg catcaactcc ccaaatctc
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ctactgtctt cccctcctcc ctgggacctg tctatcccc agaggccaga caggccttcc
120
tcgcatgcaa gagtctccct cgccttgccg gacagtggcc tccatctacc tgctgtctt
180
gctggactcc agaacactcc agtcctttcc cccttggggg ttgggggggg ccccccttt
240
ttttccccc ctttccctct tcattccaca ggaggccagc ctcaacatcc ccccc
296

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<210> 2450

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2450

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Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
  1          5          10         15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
      20         25         30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
      35         40         45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

50 55 60
 Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile
 65 70 75 80
 Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa
 85 90

<210> 2451

<211> 589

<212> DNA

<213> Homo sapiens

<400> 2451

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 tgcaacgatg atcttgtag cgatgtattg accggtgtgt gggccgatct tgtgggccag
 120
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 180acgcattgct cattacgggt ccgcttgat caggtcggtc gaatgctgcg 240
 aaggcctttg cagcggcgct acagtgcgc gaccatggat gcgggcagtg caatgcctgt
 300
 cgaaccngcc tgtcaggcgc ccatactgac gtcacctcg tgcgtactga ggcgtgtct
 360
 attggcgtcg attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttcgggtccc
 420
 cggggcgtcc ccagggttgt cgctcgcgaa gatgccgacc gcatcactga acgcggagct
 480
 gacgccttgc ttaaagctat cgaggagcct gcgccgaaa ccgtctggtt gctgtgtgcc
 540
 cctactccag aggacgtcat cgtcacgac aggtcgagat gtcggcgcc
 589

<210> 2452

<211> 121

<212> PRT

<213> Homo sapiens

<400> 2452

Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro
 1 5 10 15
 Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala
 20 25 30
 Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala
 35 40 45
 Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu
 50 55 60
 Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe
 65 70 75 80
 Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala
 85 90 95
 Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg
 100 105 110
 Thr Glu Ala Leu Ser Ile Gly Val Asp
 115 120

<210> 2453
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 2453
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 agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac
 120
 acaggttggc acacgcacat gcccctgggt atgtctatgt ccattcatcc atcccagcct
 180
 gtgcacgtcc tctcactcct gtgttcacac ctatgcccaa atgaaccaag ggacacacat
 240
 gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgtctca
 300
 gaggcatttg tgtgcgtggg catttgacgc atgactcaga acggagtatg ggggtggcgcg
 360
 gcgtggctgg ggaggtecca tcagcccgcc tctgaaaccc tcccaacctg cccatcctgg
 420
 cccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa
 480
 gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctccccctgg
 540
 gaccggccac gacgcagtgc ccacaggagc caccaggtga catgggtgct gcactaggca
 600
 ggggtggcca gggaatgggt gagtgtggga aagaggctgt ggacccgact tagtcatgtc
 660
 agccccccga agaaggagca ccaggctcca gatct
 695

<210> 2454
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 2454
 Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro
 1 5 10 15
 Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu
 20 25 30
 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His
 35 40 45
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr
 50 55 60
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr
 65 70 75 80
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln
 85 90 95
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys
 100 105 110
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys
 115 120 125
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

130 135 140
 Leu Ser Pro Arg Asp Arg Pro Arg Arg Ser Ala His Arg Asp His Gln
 145 150 155 160
 Val Thr Trp Val Leu His
 165

<210> 2455
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 2455
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 120
 aaagaactcg ttctgggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc
 180
 gcgctgtttg caggcgtggt gttgctgttc gcggtgctgg tgctgctgta ccggcgcttg
 240
 ctgccgccgt tcatcaacgt gatgtcgctg gcggtggcac cgctggggcg gttgatcggc
 300
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 360
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 378

<210> 2456
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 2456
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 Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile
 20 25 30
 Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser
 35 40 45
 Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala
 50 55 60
 Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Leu Tyr Arg Arg Leu
 65 70 75 80
 Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly
 85 90 95
 Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val
 100 105 110
 Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn
 115 120 125

<210> 2457
 <211> 754
 <212> DNA
 <213> Homo sapiens

<400> 2457

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 atgagcgaat gtgacatctt gcacactctg cgatggctctt ctgggctccg gatcagctcc
 120
 tatgtcaact ggataaagga tcaccttacc aaacagggaa tgaaggctga gcatgctagc
 180
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaaatatga tgttgaaata
 240
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc
 300
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta
 360
 aaaggcccg gtcttttttg gatgagcatt tttctaagat ggctgctgag actgatcctc
 420
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct
 480
 atgcacggtt caccagagcc tatttgctgc aaaactttaa tgaagaggga acaactgaga
 540
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt
 600
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg
 660
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcctggcgca
 720
 atgcctttgc caatgacacc atcccttcac gcgt
 754

<210> 2458

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2458

Met	Asn	Ser	Pro	Glu	Met	Ser	Glu	Cys	Asp	Ile	Leu	His	Thr	Leu	Arg
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Trp	Ser	Ser	Arg	Leu	Arg	Ile	Ser	Ser	Tyr	Val	Asn	Trp	Ile	Lys	Asp
			20					25					30		
His	Leu	Ile	Lys	Gln	Gly	Met	Lys	Ala	Glu	His	Ala	Ser	Ser	Leu	Leu
		35					40					45			
Glu	Leu	Ala	Ser	Thr	Thr	Lys	Cys	Ser	Ser	Val	Lys	Tyr	Asp	Val	Glu
	50					55					60				
Ile	Val	Glu	Glu	Tyr	Phe	Ala	Arg	Gln	Ile	Ser	Ser	Phe	Cys	Ser	Ile
65				70					75					80	
Asp	Cys	Ala	Thr	Ile	Leu	Gln	Leu	His	Glu	Ile	Pro	Ser	Leu	Gln	Ser
			85					90					95		
Ile	Tyr	Thr	Leu	Asp	Ala	Ala	Ile	Leu	Lys	Gly	Pro	Gly	Leu	Phe	Gly
		100					105					110			
Met	Ser	Ile	Phe	Leu	Arg	Trp	Leu	Leu	Arg	Leu	Ile	Leu	Ile	Ser	Arg
	115						120				125				
Leu	Arg	Leu	Pro	Arg	Thr	Tyr	Phe	Gln	Pro	Arg	Cys	Asn	Ser	Leu	Thr
	130					135					140				
Pro	Met	His	Arg	Ser	Pro	Glu	Pro	Ile	Cys	Cys	Lys	Thr	Leu	Met	Lys

145 150 155 160
 Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
 165 170 175
 Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
 180 185 190
 Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
 195 200 205
 Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
 210 215 220
 Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
 225 230 235

<210> 2459

<211> 382

<212> DNA

<213> Homo sapiens

<400> 2459

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 120
 ctcaacgcgg ccaatgacga gtatgtcgac atggtagagg ccggcatcat tgacccggcc
 180
 aagggtgaccc gttcggtctc gcagaacgcc gcgtccatcg cgccctgtt cctcaccact
 240
 gaagccgtca tcgctgacaa gcccagcct gttaaggctc ccgctggcgg cggatgatg
 300
 gacggtatgg gtggcatggg cggcatgatg tgategtgta ttgccttcgc tgatttgagt
 360
 gggatgccac tttgccccag gc
 382

<210> 2460

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2460

Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
 1 5 10 15
 Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
 20 25 30
 Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
 35 40 45
 Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
 50 55 60
 Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
 65 70 75 80
 Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
 85 90 95
 Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
 100 105 110

<210> 2461
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 2461
 tccggacaaa agggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc
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 tgcaatgctg tttgtcgta tgctcggggg caagcaccca cgggctaaaa tcgaaattca
 120
 cgaatgtgta ttcgcagtcg cggatacgt gcaacacacc tacaccaat tgcgcgacgg
 180
 ctggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgac
 240
 ggctggaaag tcgaactcag ccagatggcg ccgctgccg acgcgcatca cctgtacttc
 300
 atcaacctcg gcggtacga ggccaacgct tttggcgagg cccatcatta cctgctggtg
 360
 gtcgccccgg acaaacagga agccaagcgc aaggggcagc ggcaaagtgt gcaacactgg
 420
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctggtg
 480
 gacggtcgt atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac
 540
 tacatcatcc tgccgcga
 558

<210> 2462
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2462
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu
 1 5 10 15
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr
 20 25 30
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn
 35 40 45
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val
 50 55 60
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp
 65 70 75 80
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg
 85 90 95
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly
 100 105 110
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Asn Val
 115 120 125
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg
 130 135 140
 Leu Leu Ala Asp
 145

<210> 2463
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 2463
 cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccggt gagcgccaag
 60
 ttccgcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg
 120
 ccctatggcg aaaccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg
 180
 ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat
 240
 accttgggca ttgccttctt gacgacgacg ctggcgtttc tgctcggtgg tttgagcggg
 300
 ttggtcgcgg cgatcaaggg cggttgggtc gac
 333

<210> 2464
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2464
 Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe
 1 5 10 15
 Gly Leu Leu Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro
 20 25 30
 Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala
 35 40 45
 Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp
 50 55 60
 Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala
 65 70 75 80
 Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu
 85 90 95
 Val Ala Ala Ile Lys Gly Gly Trp Val Asp
 100 105

<210> 2465
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 2465
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 atgaccagag gctggcggcc cacctggcag gaacagatgc cagctctgct gcagccatcg
 120
 ccccttgagc ggggtggctct gtgcctcttt ctgcactgct ggtgggtggg gctgttggct
 180
 ggggtgatga taccggctgc cagagatggc tcaggtgcca gctgctgggc tatctcaggc
 240

actggetgct gggctatctc gggtgccggc tgetgggcta tctcaggcgc tggctgctgc
 300
 tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt
 360
 gctgggtgcc agctgctgcc taccttgac tgggctctgg gcactcactg cactcgggct
 420
 tttccatctc cgac
 434

<210> 2466

<211> 82

<212> PRT

<213> Homo sapiens

<400> 2466

Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile
 1 5 10 15
 Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile
 20 25 30
 Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp
 35 40 45
 Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu
 50 55 60
 Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro
 65 70 75 80
 Ser Pro

<210> 2467

<211> 306

<212> DNA

<213> Homo sapiens

<400> 2467

atggactcca ccggcaccgg agcaggggggt aaggggaaga agggagcggc cgggcgcaag
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 gtcggcgggc caaggaagaa gtccgtgtcg aggtccgtga aggccggtct ccagttcccc
 120
 gtcggccgca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc
 180
 gccccctct acctcgccgc tgtctcgaa tacctcgccg ctgaggttct ggagctcgcc
 240
 ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg
 300
 atccgg
 306

<210> 2468

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2468

Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

1		5		10		15									
Ala	Gly	Arg	Lys	Val	Gly	Gly	Pro	Arg	Lys	Lys	Ser	Val	Ser	Arg	Ser
		20		25		30									
Val	Lys	Ala	Gly	Leu	Gln	Phe	Pro	Val	Gly	Arg	Ile	Gly	Arg	Tyr	Leu
	35			40		45									
Lys	Lys	Gly	Arg	Tyr	Ala	Gln	Arg	Val	Gly	Thr	Gly	Ala	Pro	Val	Tyr
	50			55		60									
Leu	Ala	Ala	Val	Leu	Glu	Tyr	Leu	Ala	Ala	Glu	Val	Leu	Glu	Leu	Ala
65				70		75				80					
Gly	Asn	Ala	Ala	Arg	Asp	Asn	Lys	Lys	Thr	Arg	Ile	Ile	Pro	Arg	His
		85		90		95									
Val	Leu	Leu	Ala	Ile	Arg										
		100													

<210> 2469

<211> 489

<212> DNA

<213> Homo sapiens

<400> 2469

gccggcgtgg cacatggctt cctgaagcc agcattgccc tggccaagga agctttgcag
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aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
120

ggaaagggca ttcaaaggcc agggacagag tatggtcaaa ggcatggaga tgaggaagag
180

gggaccagag cagaggggtca ggttggaaag cgagttgggg tcaatctgca aaggggctga
240

cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300

cagtgggaat gttggagaaa acactttttg gtgtcggttac attgaatctg ctcatttata
360

agaataaaac tttatttcat agagttattg tatgggtcaa aataggtatg aagaattaag
420

aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480

aacgtggag

489

<210> 2470

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2470

Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg

1		5		10		15
---	--	---	--	----	--	----

Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu

	20			25		30
--	----	--	--	----	--	----

Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val

	35			40		45
--	----	--	--	----	--	----

Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu

	50			55		60
--	----	--	--	----	--	----

Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

65 70 75 80
 Lys Gln Glu His Ser Leu Val Leu Ser Asp His Phe Arg Trp Lys Gly
 85 90 95
 Ser Gly Asn Val Gly Glu Asn Thr Phe Trp Cys Arg Tyr Ile Glu Ser
 100 105 110
 Ala His Leu
 115

<210> 2471
 <211> 779
 <212> DNA
 <213> Homo sapiens

<400> 2471
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 60
 ctcacatggt ggccttgac ttctttcaca gtgaggacct ctgcttcacg aggtcctata
 120
 gaagaggagc taaggactat tttgtcatgg gggcgccaat ccaactgcac ttctactata
 180
 attctctcat ttctgaggc aatatcagct ccaagatgtg tccaggagtt cttaggataa
 240
 gcactgtaaa gatgaacttt ccataaacc ccaattgttc ctgggtcaat atgaattcca
 300
 ttcatacggg cacaaaagac tcctctgag gctctaagga gaatcagaag cttttgttcc
 360
 ttttctaagg gattttctaa agtaccact ttcagctccc cgctgcaat gaccatgcat
 420
 gccacactca gaacattgct tctgtccaca gggaagtcta aggtcccat cacatacagc
 480
 cctttgaaga attggaaaat ctgtatccac aaggacagtt ctggtgggta aaatgagaac
 540
 gtcaccccca gggcctggaa tggattgtt gtatcctccc cagccttctt caacaccttg
 600
 ccatgtttca gggagggacc attttaaagc tgattcaggg gcagaggtag aagctgaaat
 660
 agttgggggc ataccttctt tcacccggag aatgacttga acttggcctt cacctaaaac
 720
 cagataggtg agttgcctca gctggtatt gaagaaccag tcacagcctt ggttctggc
 779

<210> 2472
 <211> 181
 <212> PRT
 <213> Homo sapiens

<400> 2472
 Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile
 1 5 10 15
 Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro
 20 25 30
 Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly
 35 40 45
 Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

50		55		60											
Lys	Leu	Leu	Ile	Leu	Leu	Arg	Ala	Ser	Glu	Gly	Val	Phe	Cys	Asp	Arg
65				70						75					80
Met	Asn	Gly	Ile	His	Ile	Asp	Pro	Gly	Thr	Ile	Gly	Val	Tyr	Gly	Lys
			85						90					95	
Val	His	Leu	Tyr	Ser	Ala	Tyr	Pro	Lys	Asn	Ser	Trp	Thr	His	Leu	Gly
		100						105					110		
Ala	Asp	Ile	Ala	Ser	Gly	Asn	Glu	Arg	Ile	Ile	Val	Glu	Asp	Ala	Val
		115					120					125			
Asp	Trp	Arg	Pro	His	Asp	Lys	Ile	Val	Leu	Ser	Ser	Ser	Ser	Tyr	Glu
	130					135					140				
Pro	His	Glu	Ala	Glu	Val	Leu	Thr	Val	Lys	Glu	Val	Lys	Gly	His	His
145				150					155					160	
Val	Arg	Ile	Tyr	Glu	Arg	Leu	Lys	His	Arg	His	Ile	Gly	Ser	Val	His
			165					170						175	
Val	Thr	Glu	Asp	Gly											
			180												

<210> 2473

<211> 698

<212> DNA

<213> Homo sapiens

<400> 2473

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nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga
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cgcctctgct ccaaggccca cagctggcag ccgningcat ccagaacca taccggggca
120
ccgtggtgtg gatggtacnc tgagaatgtg gacatctctg tgacctcta cagggacccc
180
cacgtggacc agtatgagga caaagagtgg acatttatta ttgaaaatga gtctaagggg
240
cagcggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtagc
300
ntgtccaagt ccnactgag gctgcggctg aagccaaagt cagtgaagac ggtgcaggct
360
gagctgagcc tcaactcttc cggggtgctg ctgcgggagg gccgtgccac ggacgatgac
420
atgcagagtc tcgcaagcct catgagtgtg aagcctagt atgtgggcaa cttggatgac
480
tttgctgaga gtgatgaaga tgaggtcat ggcccaggag ccccgaggag ccggggtcga
540
gtcccccagc caggtgggct cacagcctgc tgtggatcga gactgccaag acctggggag
600
ggagggttac ccgggccacc agccacttgc tgtgcccggc ctgtgatggg aactcattac
660
tgcccaggca gtcccaacca acccagcagc ctcaattg
698

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<210> 2474

<211> 232

<212> PRT

<213> Homo sapiens

<400> 2474

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr
 1 5 10 15
 Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa
 20 25 30
 Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
 35 40 45
 Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
 50 55 60
 Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
 65 70 75 80
 Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
 85 90 95
 Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
 100 105 110
 Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
 115 120 125
 Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
 130 135 140
 Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
 145 150 155 160
 Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
 165 170 175
 Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
 180 185 190
 Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala
 195 200 205
 Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
 210 215 220
 Pro Asn Gln Pro Ser Ser Leu Asn
 225 230

<210> 2475

<211> 1251

<212> DNA

<213> Homo sapiens

<400> 2475

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc
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 agccccctcc tggcctgctg gcagcccatc ctctgctgg tgctgggctc agtgctgtca
 120
 ggctcgccca cgggctgccc gccccgctgc gactgctccg cccaggaccg cgctgtgctg
 180
 tgccaccgca agcgtttgt ggcagtcccc gagggcatcc ccaccgagac gcgcctgctg
 240
 gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag cttcccgcac
 300
 ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccgg cgccttcaac
 360
 aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgcta
 420
 ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt
 480

atcctactgg actacatggt tcaggacctg tacaacctca agtcactgga ggttggcgac
 540
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg
 600
 acgtgggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc
 660
 ctcacgtgcc tgaggctccg gcacctcaac atcaatgcca tccgggacta ctccttcaag
 720
 aggtgtacc gactcaaggt cttggagatc tcccactggc cctacttga caccatgaca
 780
 cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg caatctgacc
 840
 gctgtgccct acctggccgt ccgccaccta gtctatctcc gcttctcaa cctctcctac
 900
 aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc
 960
 cagctgggtg gcgggcagct ggccgggtgg agccctgcct tccgcggcct caactacctg
 1020
 cgcgtgctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg
 1080
 gtggggcaacc tggagacact catcctggac tccaaccgcg tggcctgcga ctgtcggctc
 1140
 ctgtgggtgt tccggcgccg tggectacaa acttcaaccg gcagcagccc acgtgcgcca
 1200
 cgccccgagt tgtccagggg caaggagtgc aaggacttcc ctgatgtgct a
 1251

<210> 2476

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2476

Xaa Ala Pro Glu Met Gln Val Ser Lys Arg Met Leu Ala Gly Gly Val
 1 5 10 15
 Arg Ser Met Pro Ser Pro Leu Leu Ala Cys Trp Gln Pro Ile Leu Leu
 20 25 30
 Leu Val Leu Gly Ser Val Leu Ser Gly Ser Ala Thr Gly Cys Pro Pro
 35 40 45
 Arg Cys Glu Cys Ser Ala Gln Asp Arg Ala Val Leu Cys His Arg Lys
 50 55 60
 Arg Phe Val Ala Val Pro Glu Gly Ile Pro Thr Glu Thr Arg Leu Leu
 65 70 75 80
 Asp Leu Gly Lys Asn Arg Ile Lys Thr Leu Asn Gln Asp Glu Phe Ala
 85 90 95
 Ser Phe Pro His Leu Glu Glu Leu Glu Leu Asn Glu Asn Ile Val Ser
 100 105 110
 Ala Val Glu Pro Gly Ala Phe Asn Asn Leu Phe Asn Leu Arg Thr Leu
 115 120 125
 Gly Leu Arg Ser Asn Arg Leu Lys Leu Ile Pro Leu Gly Val Phe Thr
 130 135 140
 Gly Leu Ser Asn Leu Thr Lys Leu Asp Ile Ser Glu Asn Lys Ile Val
 145 150 155 160
 Ile Leu Leu Asp Tyr Met Phe Gln Asp Leu Tyr Asn Leu Lys Ser Leu

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<210> 2477
<211> 548
<212> DNA
<213> Homo sapiens
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<400> 2477
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120
aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggctctga agcggcgggc
180
ctgtctctgg ccgtgaccat ggacctctg gagacctcta tcaaggatgg catcctctac
240
cagcagcatg tcaagtttg caagaagtgc tggcggaagg tgtgggctct gctgtatgca
300
ggaggcccat caggcgtagc acggctggag aactgggagg tccgggatgg tggcctggga
360
gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg
420

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gctgactgtg tgtccgtgct gccggtgac ggcgagagct gcccccgga caccggtgcc
 480
 ttctgtctca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg
 540
 atgggccc
 548

<210> 2478<211> 113

<212> PRT

<213> Homo sapiens

<400> 2478

Leu	Glu	Thr	Pro	Ile	Lys	Asp	Gly	Ile	Leu	Tyr	Gln	Gln	His	Val	Lys
1				5				10					15		
Phe	Gly	Lys	Lys	Cys	Trp	Arg	Lys	Val	Trp	Ala	Leu	Leu	Tyr	Ala	Gly
		20					25				30				
Gly	Pro	Ser	Gly	Val	Ala	Arg	Leu	Glu	Asn	Trp	Glu	Val	Arg	Asp	Gly
		35				40					45				
Gly	Leu	Gly	Ala	Ala	Gly	Asp	Arg	Ser	Ala	Gly	Pro	Gly	Arg	Arg	Gly
	50				55					60					
Glu	Arg	Arg	Val	Ile	Arg	Leu	Ala	Asp	Cys	Val	Ser	Val	Leu	Pro	Ala
65			70					75					80		
Asp	Gly	Glu	Ser	Cys	Pro	Arg	Asp	Thr	Gly	Ala	Phe	Leu	Leu	Thr	Thr
			85				90						95		
Thr	Glu	Arg	Ser	His	Leu	Leu	Ala	Ala	Gln	His	Arg	Gln	Ala	Trp	Met
			100				105						110		

Gly

<210> 2479

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2479

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 ttccgcacga gctggatgga ggagaccgca ggcaccttct cactgaactg gtatcgcagc
 120
 aggtactgga atgacaatga agcagcagaa aggcttgctg tgatgtgggc taaaaccttc
 180
 aaatatgcgt cgataaacgt ctctggcag accgggatta gcaatagcga cgacgagggc
 240
 aatgaagatg aagacatgtt ctacgccggt atctccattc cgctgggagg cggggcgtag
 300
 tctaactcct ggtatcgtga atat
 324

<210> 2480

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2480

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys
 1 5 10 15
 Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr
 20 25 30
 Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala
 35 40 45
 Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser
 50 55 60
 Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly
 65 70 75 80
 Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly
 85 90 95
 Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr
 100 105

<210> 2481

<211> 484

<212> DNA

<213> Homo sapiens

<400> 2481

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 gttatgttgg cttactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca
 120
 agccctaaag gcaagcgtat tgaagctcgt ttccctgata caaccgctaa cccataccta
 180
 gcattttcag ctatgttgat ggctgggtatc gatgggtatca aaaacaagat tcaccctggc
 240
 gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa
 300
 gttgctagca gcttagaaga agcgtttaag tgcctagatc aagaccgtga gttcttgact
 360
 caaggtggcg ttttctctga cgacatgata gatgcttaca tcgctcttaa agcagaagaa
 420
 gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa
 480
 gctt
 484

<210> 2482

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2482

Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly
 1 5 10 15
 Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala
 20 25 30
 Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu
 35 40 45
 Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala
 50 55 60

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
 65 70 75 80
 Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
 85 90 95
 Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
 100 105 110
 Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
 115 120 125
 Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
 130 135 140
 Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu
 145 150 155

<210> 2483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 2483

acgcgtgtta gccaaatctt ggttctctcc gttctctctt taccgagcc tgaggccctt
 60
 ctggagaaca ggcagcctct gaggaaacct ctgatccccg atcagccacc ccacgcctg
 120
 cgtccccagc cgttctctcc tgcccttggt ccccttctcc tgtgaaggag agaacagttt
 180
 cggctggccc tgagatgctg gcaggcctgc agtcagggca gtgggcgcct cccaccttga
 240
 aatggtcctt cgtggtgcag ttctgcttac ggggtagact ttgttgctt ccacagagga
 300
 cagttagggt gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag
 360
 aagtgggaat tctctcgtgc cctggagtct gggaatgcatt ttttagtttc ccagcttcag
 420
 gtagaattga aattgagtga gccaaaccac cacatccatc tggagccagg aactagt
 477

<210> 2484

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2484

Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
 1 5 10 15
 Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
 20 25 30
 Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
 35 40 45
 Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
 50 55 60
 Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
 65 70 75 80
 Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp
 85 90 95

Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser
 100 105 110
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg
 115 120 125
 Phe Gly
 130

<210> 2485

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2485

accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc
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 aagacccgcg actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag
 120
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt ccccccgag
 180
 ctagctggca ccactctgcg tggcgtgacc cgcaagtcca ttctggaagt tgccccgac
 240
 ctcggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc
 300
 tctggcgagt tcccgggaagt ctctgcctgt ggtaccgccg cggttgtcac accgatcggc
 360
 tctttcttag atggagatac cgacgtgaag gtctctgagc ccaccggaaa gaccacgatg
 420
 gagatccgtc gccgtctgct ggatatccag ttccggacgcg ctgaggacac ccatggctgg
 480
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cggccccaat gatgtgttca
 540
 cgatcgggct acgacggtgt cgatgacaat gtcttcgggc tggaagggtt gcccgacggt
 600
 gaacgcgt
 608

<210> 2486

<211> 165

<212> PRT

<213> Homo sapiens

<400> 2486

Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser
 1 5 10 15
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp
 20 25 30
 Ala Val Glu His Arg Trp Ile Glu Leu Gly Gly Met Asn Phe Met
 35 40 45
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr
 50 55 60
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp
 65 70 75 80
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu
 85 90 95

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr
 100 105 110
 Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp
 115 120 125
 Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg
 130 135 140
 Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp
 145 150 155 160
 Leu Lys Arg Val Cys
 165

<210> 2487

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2487

nnccccctcag gagagcagcc catggaaggt cccccccaag gggcccctga gagccctgac
 60
 agtctgcaaa gaaaccagaa agagctccag ggctctctga cccagggtgca agccctggag
 120
 aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc
 180
 cagctgggag gggtgctcc tcaggctcct gctgcccacc aaaagcccga ggctcagtg
 240
 gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag
 300
 accttggtaa ggctgctgga cattgaagag gctgtgcac
 339

<210> 2488

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2488

Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro
 1 5 10 15
 Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu
 20 25 30
 Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp
 35 40 45
 Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly
 50 55 60
 Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val
 65 70 75 80
 Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln
 85 90 95
 Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val
 100 105 110
 His

<210> 2489

<211> 594

<212> DNA

<213> Homo sapiens

<400> 2489

nacgcgttct tcggactggc gacgatgctg atttctatcc cgacgggggt gaagctattt
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 aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc
 120
 ctgggcttca tggtagacct cgcgatcgga ggcataccg gcgtactgct ggccatcccg
 180
 ggtgctgact tcgtactgca caacagcctg ttcggaattg ctcaattcca caacgtgatc
 240
 atcggcggcg cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcgttc
 300
 ggcttcaagc tgcacgaaag ctggggcaag gctgcattct ggttctggat ctggggcttc
 360
 ttcgctcgct tcattgccgt ctatgcactg ggtttcatgg gcatgaccg ttgtttgaac
 420
 gcccccccca cccctgagtg ggtcccgta cgtacgttg ccatggtcgg tgcactgatg
 480
 atcgtgtcgt gtatgcctg ccagttgatt cagctgtatg tcagcgtgcg tgatcgcaag
 540
 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccttggatg gtcg
 594

<210> 2490

<211> 198

<212> PRT

<213> Homo sapiens

<400> 2490

Xaa	Ala	Phe	Phe	Gly	Leu	Ala	Thr	Met	Leu	Ile	Ser	Ile	Pro	Thr	Gly
1				5					10					15	
Val	Lys	Leu	Phe	Asn	Trp	Leu	Val	Thr	Ile	Tyr	His	Gly	Arg	Val	Arg
			20					25					30		
Ile	Thr	Ser	Gln	Val	Leu	Trp	Thr	Leu	Gly	Phe	Met	Val	Thr	Phe	Ala
		35					40					45			
Ile	Gly	Gly	Met	Thr	Gly	Val	Leu	Leu	Ala	Ile	Pro	Gly	Ala	Asp	Phe
	50					55					60				
Val	Leu	His	Asn	Ser	Leu	Phe	Gly	Ile	Ala	His	Phe	His	Asn	Val	Ile
65					70					75				80	
Ile	Gly	Gly	Ala	Val	Phe	Gly	Tyr	Ile	Ala	Gly	Phe	Ser	Phe	Tyr	Phe
			85					90					95		
Pro	Lys	Ala	Phe	Gly	Phe	Lys	Leu	His	Glu	Ser	Trp	Gly	Lys	Ala	Ala
			100					105					110		
Phe	Trp	Phe	Trp	Ile	Ser	Gly	Phe	Phe	Val	Ala	Phe	Met	Pro	Leu	Tyr
		115				120						125			
Ala	Leu	Gly	Phe	Met	Gly	Met	Thr	Arg	Cys	Leu	Asn	Ala	Pro	Pro	Thr
	130					135					140				
Pro	Glu	Trp	Val	Pro	Tyr	Leu	Tyr	Val	Ala	Met	Val	Gly	Ala	Leu	Met
145					150					155				160	
Ile	Ala	Val	Gly	Ile	Ala	Cys	Gln	Leu	Ile	Gln	Leu	Tyr	Val	Ser	Val
				165					170					175	

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala
 180 185 190
 His Thr Leu Glu Trp Ser
 195

<210> 2491
 <211> 592
 <212> DNA
 <213> Homo sapiens

<400> 2491
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 actacgttgt tgcttggtct attccatgca gtaacgacga atatgtcgcg atctcaggat
 120
 gatcttgacg tggtcgaaag cggaactgta ttccgcgcgc tcaactccggc tgcggcacccg
 180
 cgtcccggtg tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg
 240
 ccagcccagc cgcgcatgct cgcgcccggtg atctgtggca gctggctgcc cgatcgctgg
 300
 gatggagagt cggtaagggc tgactggcga cacgtgtgtc tggtcgcccga gaaggctgtc
 360
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggtccatg gcaccccggt
 420
 cgttgtgagg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc
 480
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat
 540
 gctttgtag cctgcgctcc gagcgggtgt gaggtcatgg ttatttcaag gt
 592

<210> 2492
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 2492
 Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg
 1 5 10 15
 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr
 20 25 30
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly
 35 40 45
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val
 50 55 60
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu
 65 70 75 80
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu
 85 90 95
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala
 100 105 110
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val
 115 120 125

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala
 130 135 140
 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro
 145 150 155 160
 Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu
 165 170 175
 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val
 180 185 190
 Met Val Ile Ser Arg
 195

<210> 2493

<211> 418

<212> DNA

<213> Homo sapiens

<400> 2493

acgcgtcagg ttgccggtga tcgtgccacc gtcacctcca tgggtgccttc aggagcagac
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 cccacacact atgagccgctc gctgcggtgac gttcggaccg tcgtgtattc gagagtcgcg
 120
 ctatcgaact acctcatgct cgaacctcat tcggtcatca agaccatcga ctcttcctta
 180
 cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg
 240
 atccccgctgg ttgaaaatgc caacctagac accgtgtggc tgggggttgcg cgtcattggc
 300
 aagggcgcca ggccggggagc cgaccgctct tcctcggctct acctccagct gacgtcggtg
 360
 gaggggcctg gggacttcac tgcctatatc actgggacct ttggtcgacc tcagatct
 418

<210> 2494

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2494

Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro
 1 5 10 15
 Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg
 20 25 30
 Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu
 35 40 45
 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser
 50 55 60
 Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val
 65 70 75 80
 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu
 85 90 95
 Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser
 100 105 110
 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala
 115 120 125

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile
130 135

<210> 2495

<211> 1478

<212> DNA

<213> Homo sapiens

<400> 2495

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agtctctccg ccaggtcccg cggcccgcac ctgccgcccg cacctgcagc tccgcacctg
120
cggccagtgc ctactgccct ctcttgccgc ccgcacctgc agccccgcac ctgccgcttg
180
cacctgcagc cccgcgctct acccggttca agcatggctg accagggcgc cttcgacacg
240
gacgtcaaca ccctgacctg cttcgtcatg gaggagggca ggaaggcccg cggcacgggc
300
gagttgacct agctgtcaa ctgcctctgc acagcagtca aagccatctc ttcggcggtg
360
cgcaaggcgg gcctcgcgca cctctatggc attgctggtt ctaccaacgt gacaggtgat
420
caagttaaga agctggacgt cctctccaac gacctggtta tgaacatggt aaagtcattc
480
tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag
540
aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc
600
cttgtgtccg ttggaacctt ttttggcatc tatagaaaga aatcaactga tgagccttct
660
gagaaggatg ctctgcaacc aggcgggaac ctggtggcag cgggctacgc actgtatggc
720
agtgccacca tgctggctct tgccatggac tgtgggggtca actgcttcat gctggacctg
780
gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc
840
tacagcctta acgagggcta cgccaaggac tttgacctg ccgtcactga gtacatccag
900
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960
gtggctgatg ttcctgcgac tctggtctac ggagggatat ttctgtacct cgctaacaag
1020
aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg
1080
gagaaggctg ggggaatggc caccactggg aaggaggccg tgtagacgt cattcccaca
1140
gacattcacc agagggcgcc ggtgatcttg ggggtccccg acgacgtgct cgagttcctg
1200
aaggtgtatg agaagcactc tgcccagtga gcacctgccc tgctgcacg cggagaattg
1260
cctctacctg gaccttttgt ctacacagc agtacctga cctgctgtgc accttacatt
1320

cctagagagc agaaataaaa agcatgacta tttccacccat caaatgctgt agaattgcttg
 1380
 gcactcccta accaaatgct gtctccataa tgccactggg gtttaagatat attttgagtg
 1440
 gatggaggag aaataaactt attcctcctt aaaaaaaaa
 1478

<210> 2496

<211> 338

<212> PRT

<213> Homo sapiens

<400> 2496

Met	Ala	Asp	Gln	Ala	Pro	Phe	Asp	Thr	Asp	Val	Asn	Thr	Leu	Thr	Arg
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Phe	Val	Met	Glu	Glu	Gly	Arg	Lys	Ala	Arg	Gly	Thr	Gly	Glu	Leu	Thr
			20					25					30		
Gln	Leu	Leu	Asn	Ser	Leu	Cys	Thr	Ala	Val	Lys	Ala	Ile	Ser	Ser	Ala
			35				40					45			
Val	Arg	Lys	Ala	Gly	Ile	Ala	His	Leu	Tyr	Gly	Ile	Ala	Gly	Ser	Thr
	50				55					60					
Asn	Val	Thr	Gly	Asp	Gln	Val	Lys	Lys	Leu	Asp	Val	Leu	Ser	Asn	Asp
65				70					75					80	
Leu	Val	Met	Asn	Met	Leu	Lys	Ser	Ser	Phe	Ala	Thr	Cys	Val	Leu	Val
			85					90					95		
Ser	Glu	Glu	Asp	Lys	His	Ala	Ile	Ile	Val	Glu	Pro	Glu	Lys	Arg	Gly
			100					105					110		
Lys	Tyr	Val	Val	Cys	Phe	Asp	Pro	Leu	Asp	Gly	Ser	Ser	Asn	Ile	Asp
	115						120						125		
Cys	Leu	Val	Ser	Val	Gly	Thr	Ile	Phe	Gly	Ile	Tyr	Arg	Lys	Lys	Ser
	130					135					140				
Thr	Asp	Glu	Pro	Ser	Glu	Lys	Asp	Ala	Leu	Gln	Pro	Gly	Arg	Asn	Leu
145					150					155				160	
Val	Ala	Ala	Gly	Tyr	Ala	Leu	Tyr	Gly	Ser	Ala	Thr	Met	Leu	Val	Leu
			165					170					175		
Ala	Met	Asp	Cys	Gly	Val	Asn	Cys	Phe	Met	Leu	Asp	Pro	Ala	Ile	Gly
			180					185					190		
Glu	Phe	Ile	Leu	Val	Asp	Lys	Asp	Val	Lys	Ile	Lys	Lys	Lys	Gly	Lys
	195						200					205			
Ile	Tyr	Ser	Leu	Asn	Glu	Gly	Tyr	Ala	Lys	Asp	Phe	Asp	Pro	Ala	Val
	210					215					220				
Thr	Glu	Tyr	Ile	Gln	Arg	Lys	Lys	Phe	Pro	Pro	Asp	Asn	Ser	Ala	Pro
225				230						235				240	
Tyr	Gly	Ala	Arg	Tyr	Val	Gly	Ser	Met	Val	Ala	Asp	Val	His	Arg	Thr
			245						250					255	
Leu	Val	Tyr	Gly	Gly	Ile	Phe	Leu	Tyr	Pro	Ala	Asn	Lys	Lys	Ser	Pro
			260					265					270		
Asn	Gly	Lys	Leu	Arg	Leu	Leu	Tyr	Glu	Cys	Asn	Pro	Met	Ala	Tyr	Val
	275						280					285			
Met	Glu	Lys	Ala	Gly	Gly	Met	Ala	Thr	Thr	Gly	Lys	Glu	Ala	Val	Leu
295				300											290
Asp	Val	Ile	Pro	Thr	Asp	Ile	His	Gln	Arg	Ala	Pro	Val	Ile	Leu	Gly
305					310					315				320	
Ser	Pro	Asp	Asp	Val	Leu	Glu	Phe	Leu	Lys	Val	Tyr	Glu	Lys	His	Ser

325
Ala Gln

330

335

<210> 2497

<211> 399

<212> DNA

<213> Homo sapiens

<400> 2497

acgcgtgtct tggccggtga aacccttccc gcagcagggt cagtacgtcg caccggcgag
60

cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg
120

atcctgtcag cgcgtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag
180

atggcgaacg gttccgagga cgaccgtgcc gttgcgatgg acaaatacgc gaaggctgaa
240

gaccgtctcg tcgcggcccg tggctatggc gcctctgcag aggcagcccg aatcgcgtcg
300

aacttggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc ggggtggtcag
360

cgtcgtcgcg tcgagctggc gcgcacccctc ttttccgga
399

<210> 2498

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2498

Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg
1 5 10 15

Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp
20 25 30

Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp
35 40 45

His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly
50 55 60

Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu
65 70 75 80

Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala
85 90 95

Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro
100 105 110

Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg
115 120 125

Ile Leu Phe Ser Gly
130

<210> 2499

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2499

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tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg
120
tggatcacca tcttgcgcaa gcgcgacaac ttctcgaaaag ccttcgacga ttccagccc
180
gagaagatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgccggcatc
240
gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc
300
atggaaaaag gcccgggctt ctccaggctg ctgtgggact tcgtcgac
348

<210> 2500

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2500

Xaa	Pro	Gly	Glu	Asp	Pro	Phe	Tyr	Met	Ala	Tyr	His	Asp	Thr	Glu	Trp
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Gly	Val	Pro	Glu	Tyr	Asp	Asp	Arg	Ala	Leu	Tyr	Glu	Lys	Leu	Ile	Leu
		20					25					30			
Asp	Gly	Phe	Gln	Ala	Gly	Leu	Ser	Trp	Ile	Thr	Ile	Leu	Arg	Lys	Arg
		35				40					45				
Asp	Asn	Phe	Arg	Lys	Ala	Phe	Asp	Asp	Phe	Gln	Pro	Glu	Lys	Ile	Ala
	50				55				60						
Arg	Tyr	Asn	Glu	Lys	Lys	Val	His	Ala	Leu	Met	Asn	Asp	Ala	Gly	Ile
65			70					75					80		
Val	Arg	Asn	Arg	Ala	Lys	Ile	Glu	Gly	Thr	Ile	Ala	Ser	Ala	Lys	Ala
		85				90					95				
Tyr	Leu	Asp	Ile	Met	Glu	Lys	Gly	Pro	Gly	Phe	Ser	Arg	Leu	Leu	Trp
		100				105						110			
Asp	Phe	Val	Asp												
		115													

<210> 2501

<211> 569

<212> DNA

<213> Homo sapiens

<400> 2501

gaattcgatt catttgtggc aaatgcttac aatttgatga ttgtaacca tcaaatcaca
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taatgcccat taagccactc catacacttc tttaaataagg aaaatatatg taaagtacgt
120
acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggatatg
180
ctttcaagag tcaacaatt ttactgggtgc atcatttcca ttattctttt ctcttttgca
240
taataaaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaaag
300

tagattctat agcttcaact cctgaagag atgtgtgcta attacatca aaaaaatcct
 360
 taagggtata aaatatgcca agaactgtca acatcacaga ttaccactgg tagcttctgg
 420
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct
 480
 acactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataaccca
 540
 gatgtgaaat gctgaatcat taatcacag
 569

<210> 2502

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2502

Met	Ile	Ala	Gly	Val	Arg	Tyr	Gly	Phe	Gln	Glu	Ser	Asn	Asn	Phe	Thr
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Gly	Ala	Ser	Phe	Pro	Phe	Ile	Leu	Ser	Leu	Leu	His	Asn	Lys	Thr	Thr
			20					25					30		
Leu	Lys	Ile	Leu	Pro	Trp	Leu	Val	Arg	Asp	Asn	Ser	Ser	Leu	Glu	Ser
	35					40					45				
Arg	Phe	Tyr	Ser	Phe	Asn	Ser	Leu	Lys	Arg	Cys	Val	Leu	Ile	Tyr	Ile
50					55					60					
Lys	Lys	Ile	Leu	Lys	Gly	Ile	Lys	Tyr	Ala	Lys	Asn	Cys	Gln	His	His
65				70					75					80	
Arg	Leu	Pro	Leu	Val	Ala	Ser	Gly	Ile	Leu	Leu	Ser	Phe	His	Leu	Ile
			85					90					95		
Phe	Lys	Gly	His												
			100												

<210> 2503

<211> 419

<212> DNA

<213> Homo sapiens

<400> 2503

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 120
 accaatgggg agcgttttct ctacctgcgc ccacctcact acgtcgggtcc ccacatccca
 180
 tcgtccttgg catcacccat gaggtctctg acaccttcgg cctccccagc catcccgctt
 240
 ctogtccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct
 300
 gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc
 360
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 419

<210> 2504

<211> 121

<212> PRT

<213> Homo sapiens

<400> 2504

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Met Tyr Lys Ala Leu Leu Pro Gln Gln Ser Tyr Ser Leu Ala Gln Pro
 1           5           10           15
Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro
      20           25           30
Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro
      35           40           45
Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val
      50           55           60
His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly
65           70           75           80
Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln
      85           90           95
Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp
      100          105          110
Thr Ala Leu Leu Leu Pro Pro Ser Arg
      115          120

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<210> 2505

<211> 540

<212> DNA

<213> Homo sapiens

<400> 2505

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120
acgaatgggc gtgtcatggc cgccatcgcg tggatcgctg tggcagcagt ctcggtcttc
180
aacgtgggttc tcgtcgtcga gacggtcgat ggtgcgatgat ccttgagggc agttttctgg
240
cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga
300
cctctgcccc cgagctagcc aacgatttgg ccaactgcatt tcgcggttac cctgctggag
360
tggcgatcct caccacgatg ggagcggctg ggcccagagg cttgacggtc tctccctgg
420
cgtcgggtgtc agtcgtcccc gctgttgtgt cggtgtcgtt gggtaatggt tcgacgaccc
480
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<210> 2506

<211> 72

<212> PRT

<213> Homo sapiens

<400> 2506

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Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

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Ser	Met	Gly	Leu	Pro	Leu	Val	Leu	Val	Pro	Leu	Ala	Arg	Phe	Thr	Gly
		20				25							30		
Asp	Arg	Arg	Leu	Met	Gly	Gln	Trp	Thr	Asn	Gly	Arg	Val	Met	Ala	Ala
		35				40						45			
Ile	Ala	Trp	Ile	Val	Val	Ala	Ala	Val	Ser	Ala	Leu	Asn	Val	Val	Leu
		50				55					60				
Val	Val	Glu	Thr	Val	Met	Gly	Ala								
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<210> 2507

<211> 922

<212> DNA

<213> Homo sapiens

<400> 2507

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 120
 acggagcagt gccccctgtt ttcacagcac aagtgcgcgc agcaccggcc gtacacctgc
 180
 ttccactggc acttcctcaa ccagcggcgc cgcaggcccc tccgcaggcg cgacggcacc
 240
 ttcaactaca gccccgacgt gtactgctcc aagtacaacg aagccaccgg cgtgtgcccc
 300
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 360
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 420
 aagaatgggc tgcactgtgc cttcgcgcac gggcccatg acctccgctc cctgtcttac
 480
 gacatcaggg agcttcaggc catggaggcc ttgcagaatg gccagaccac ggtagagggg
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 660
 aagaagcccc cgcggtctgt cgcgaaggc tatgcctgtc cctactacca caacagcaag
 720
 gaccggcggc ggagcccccg gaagcacaaa tacaggctgt ctccatgtcc aaacgtcaag
 780
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 840
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 922

<210> 2508

<211> 278

<212> PRT

<213> Homo sapiens

<400> 2508

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 20 25 30
 His Trp His Phe Leu Asn Gln Arg Arg Arg Arg Pro Leu Arg Arg Arg
 35 40 45
 Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
 50 55 60
 Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
 65 70 75 80
 Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
 85 90 95
 Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
 100 105 110
 Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
 115 120 125
 Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
 130 135 140
 Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
 145 150 155 160
 Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
 165 170 175
 Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
 180 185 190
 Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
 195 200 205
 Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
 210 215 220
 Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
 225 230 235 240
 Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
 245 250 255
 Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
 260 265 270
 Gly Gly Gly Val Arg Glu
 275

<210> 2509

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2509

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 120
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 180
 cggcaggttg ccgagggcaa acacgttgac caggttcgca ccgacaccac cgaccacggc
 240
 caccgctccc agcgggaatct cgtagactta gcgccagggt tggtaaggcg tgtagcggtc
 300

gtaacgacgg gtgacctega actcggggct tcaaagtctt ctgctgtg
348

<210> 2510

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2510

Met	Ala	Pro	Arg	Gln	Gly	Pro	Ile	Leu	Arg	Ala	Leu	Val	Ala	Leu	Asp
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Phe	Val	Asp	Ala	Arg	Glu	Val	Leu	Leu	Pro	Ala	Thr	Ile	Gly	Leu	Asp
		20						25					30		
Val	His	Glu	Arg	Val	Glu	Pro	Gly	Lys	Thr	Glu	Thr	Gln	Pro	Ile	Leu
		35					40					45			
Gly	Asp	Ala	Gly	Arg	Gln	Val	Ala	Glu	Gly	Lys	His	Val	Asp	His	Val
	50					55				60					
Arg	Thr	Asp	Thr	Thr	Asp	His	Gly	His	Arg	Ser	Gln	Arg	Asn	Leu	Val
65					70				75					80	
Asp	Leu	Ala	Pro	Gly	Leu	Val	Arg	Arg	Val	Ala	Val	Val	Thr	Thr	Gly
			85					90						95	
Asp	Leu	Glu	Leu	Gly	Ala	Ser	Lys	Ser	Ser	Ala	Val				
			100					105							

<210> 2511

<211> 663

<212> DNA

<213> Homo sapiens

<400> 2511

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120
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180
gcattacgcc caggacgcgt tgctggcctg gcggagatcg tcgtcaacgg tcaacctttt
240
accgtcactg acgccactga ggatgaacta gctctcactg cttgggctcg tatectctc
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360
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420
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480
accgtgcata gcgccctcaa cgatgccggg atctcatcgg tggccacatt gtacggcttt
540
atgtccggac agatccccgc tgaggaaacac atcccggtcg atctagctat gatcattgag
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660
gac
663

<210> 2512
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 2512
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 20 25 30
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr
 35 40 45
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro
 50 55 60
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe
 65 70 75 80
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala
 85 90 95
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln
 100 105 110
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg
 115 120 125
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile
 130 135 140
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile
 145 150 155 160
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr
 165 170 175
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro
 180 185 190
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly
 195 200 205
 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp
 210 215 220

<210> 2513
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 2513
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 120
 gacctgaagt tctgcatgga tggagtccag actgctttga ggagtgaaga ttatgagcag
 180
 gctgcagcac atattcctcg ctacttgtgc ctggacaagt cggtcattga gctcagccga
 240
 cagggcaaag agggtcagca tccgaaactg gagcatgatt gatgccaaacc tgaaattgct
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368

<210> 2514
<211> 93
<212> PRT
<213> Homo sapiens

<400> 2514
Leu Ala Gly Met Ile Thr Phe Thr Cys Asn Leu Ala Glu Asn Val Ser
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Ser Lys Val Arg Gln Leu Asp Leu Ala Lys Asn Arg Leu Tyr Gln Ala
20 25 30
Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly
35 40 45
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala Ala His
50 55 60
Ile His Arg Tyr Leu Cys Leu Asp Lys Ser Val Ile Glu Leu Ser Arg
65 70 75 80
Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp
85 90

<210> 2515
<211> 351
<212> DNA
<213> Homo sapiens

<400> 2515
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120
tatcagtcca tccctaaaag ccaaccaggc tctcccgagg gaggcaggaa atccctgctc
180
cctccatccc ccaccgggaa tgctgcaggg ggcttgaggg aggcgacaca gtggggagct
240
ctgggtgcag gtgggcagac aatgggccaa cacacccct cagccccgct ccagtatcag
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351

<210> 2516
<211> 98
<212> PRT
<213> Homo sapiens

<400> 2516
Met Ala His Pro Gly Pro Asp Pro Ser Tyr Pro Ser Asn Ser Pro Thr
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Thr Gly Gln Leu Glu Tyr Gln Ser Ile Pro Lys Ser Gln Pro Gly Ser
20 25 30
Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn
35 40 45
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala

50 55 60
 Gly Gly Gln Thr Met Gly Gln His Thr Pro Ser Ala Pro Leu Gln Tyr
 65 70 75 80
 Gln His Ser Arg Pro Thr His Leu Gly Pro Trp Ser Pro Gly Asp Leu
 85 90 95
 Thr Arg

<210> 2517
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 2517
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 cctgtcacca accaaacccc atgggcctat tcagcagccc caacttggct ggtctggccg
 180
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 240
 cagtgttgag tgggcagtgt ctactccag cccctccttc ccaggccagt tcttctcatc
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 356

<210> 2518
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 2518
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 20 25 30
 Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala
 35 40 45
 Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu
 50 55 60
 Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro
 65 70 75 80
 Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg
 85 90 95
 Pro Ser Ser Thr Gly Gln Thr
 100

<210> 2519
 <211> 830
 <212> DNA
 <213> Homo sapiens

<400> 2519

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 180
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 480
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 720
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<210> 2520

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2520

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Glu	Glu	Val	Gly	Leu	Leu	Cys	Asn	Cys	Leu	Val	Pro	Phe	Lys	Val	Ile
		20					25					30			
Leu	Pro	Cys	Trp	Gly	Arg	Cys	Ser	Ser	Ser	Phe	Gln	Arg	Arg	Lys	Arg
		35				40				45					
Gly	Trp	Gly	Val	Ala	Gly	Arg	Gly	Ser	Ser	Arg	Pro	Glu	Ser	Gln	Ser
	50					55				60					
Arg	Trp	Arg	Ala	Ala	Ser	Thr	Arg	Phe	Leu	Leu	Val	Gly	Leu	Arg	Gln
	65				70				75				80		
Gly	Leu	Ala	Pro	Gly	Leu	Ser	Gly	Lys	Arg	Glu	Glu	Glu	Leu	Arg	Leu
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Arg	Gly	Ala	Val	Leu	Pro	Arg	Arg	Leu	Thr	Gly					
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<210> 2521

<211> 4291

<212> DNA

<213> Homo sapiens

<400> 2521

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2760
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3120
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3180

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 3360
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 3540
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 3600
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 3720
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 3780
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 3840
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 4080
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 4140
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 4260
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<210> 2522

<211> 952

<212> PRT

<213> Homo sapiens

<400> 2522

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Gly	Gly	Pro	Ala	Pro	Gly	Cys	Ser	Arg	Thr	Pro	Pro	Pro	Pro	Met	
		20						25				30			
Ala	Pro	Leu	Ala	Leu	Val	Gly	Val	Thr	Leu	Leu	Leu	Ala	Ala	Pro	Pro
		35				40						45			
Cys	Ser	Gly	Ala	Ala	Thr	Pro	Thr	Pro	Ser	Leu	Pro	Pro	Pro	Pro	Ala
	50					55					60				
Asn	Asp	Ser	Asp	Thr	Ser	Thr	Gly	Gly	Cys	Gln	Gly	Ser	Tyr	Arg	Cys

65		70		75		80
Gln Pro Gly Val Leu Pro Val Trp Glu Pro Asp Asp Pro Ser Leu						
	85		90		95	
Gly Asp Lys Ala Ala Arg Ala Val Val Tyr Phe Val Ala Met Val Tyr						
	100		105		110	
Met Phe Leu Gly Val Ser Ile Ile Ala Asp Arg Phe Met Ala Ala Ile						
	115		120		125	
Glu Val Ile Thr Ser Lys Glu Lys Glu Ile Thr Ile Thr Lys Ala Asn						
	130		135		140	
Gly Glu Thr Ser Val Gly Thr Val Arg Ile Trp Asn Glu Thr Val Ser						
	145		150		155	
Asn Leu Thr Leu Met Ala Leu Gly Ser Ser Ala Pro Glu Ile Leu Leu						
	165		170		175	
Ser Val Ile Glu Val Cys Gly His Asn Phe Gln Ala Gly Glu Leu Gly						
	180		185		190	
Pro Gly Thr Ile Val Gly Ser Ala Ala Phe Asn Met Phe Val Val Ile						
	195		200		205	
Ala Val Cys Ile Tyr Val Ile Pro Ala Gly Glu Ser Arg Lys Ile Lys						
	210		215		220	
His Leu Arg Val Phe Phe Val Thr Ala Ser Trp Ser Ile Phe Ala Tyr						
	225		230		235	
Val Trp Leu Tyr Leu Ile Leu Ala Val Phe Ser Pro Gly Val Val Gln						
	245		250		255	
Val Trp Glu Ala Leu Leu Thr Leu Val Phe Phe Pro Val Cys Val Val						
	260		265		270	
Phe Ala Trp Met Ala Asp Lys Arg Leu Leu Phe Tyr Lys Tyr Val Tyr						
	275		280		285	
Lys Arg Tyr Arg Thr Asp Pro Arg Ser Gly Ile Ile Ile Gly Ala Glu						
	290		295		300	
Gly Asp Pro Pro Lys Ser Ile Glu Leu Asp Gly Thr Phe Val Gly Ala						
	305		310		315	
Glu Ala Pro Gly Glu Leu Gly Gly Leu Gly Pro Gly Pro Ala Glu Ala						
	325		330		335	
Arg Glu Leu Asp Ala Ser Arg Arg Glu Val Ile Gln Ile Leu Lys Asp						
	340		345		350	
Leu Lys Gln Lys His Pro Asp Lys Asp Leu Glu Gln Leu Val Gly Ile						
	355		360		365	
Ala Asn Tyr Tyr Ala Leu Leu His Gln Gln Lys Ser Arg Ala Phe Tyr						
	370		375		380	
Arg Ile Gln Ala Thr Arg Leu Met Thr Gly Ala Gly Asn Val Leu Arg						
	385		390		395	
Arg His Ala Ala Asp Ala Ser Arg Arg Ala Ala Pro Ala Glu Gly Ala						
	405		410		415	
Gly Glu Asp Glu Asp Asp Gly Ala Ser Arg Ile Phe Phe Glu Pro Ser						
	420		425		430	
Leu Tyr His Cys Leu Glu Asn Cys Gly Ser Val Leu Leu Ser Val Thr						
	435		440		445	
Cys Gln Gly Gly Glu Gly Asn Ser Thr Phe Tyr Val Asp Tyr Arg Thr						
	450		455		460	
Glu Asp Gly Ser Ala Lys Ala Gly Ser Asp Tyr Glu Tyr Ser Glu Gly						
	465		470		475	
Thr Leu Val Phe Lys Pro Gly Glu Thr Gln Lys Glu Leu Arg Ile Gly						
	485		490		495	
Ile Ile Asp Asp Asp Ile Phe Glu Glu Asp Glu His Phe Phe Val Arg						

500	505	510
Leu Leu Asn Leu Arg Val Gly Asp Ala Gln Gly Met Phe Glu Pro Asp		
515	520	525
Gly Gly Gly Arg Pro Lys Gly Arg Leu Val Ala Pro Leu Leu Ala Thr		
530	535	540
Val Thr Ile Leu Asp Asp Asp His Ala Gly Ile Phe Ser Phe Gln Asp		
545	550	555
Arg Leu Leu His Val Ser Glu Cys Met Gly Thr Val Asp Val Arg Val		
565	570	575
Val Arg Ser Ser Gly Ala Arg Gly Thr Val Arg Leu Pro Tyr Arg Thr		
580	585	590
Val Asp Gly Thr Ala Arg Gly Gly Val His Tyr Glu Asp Ala Cys		
595	600	605
Gly Glu Leu Glu Phe Gly Asp Asp Glu Thr Met Lys Thr Leu Gln Val		
610	615	620
Lys Ile Val Asp Asp Glu Glu Tyr Glu Lys Lys Asp Asn Phe Phe Ile		
625	630	635
Glu Leu Gly Gln Pro Gln Trp Leu Lys Arg Gly Ile Ser Ala Leu Leu		
645	650	655
Leu Asn Gln Gly Asp Gly Asp Arg Lys Leu Thr Ala Glu Glu Glu Glu		
660	665	670
Ala Arg Arg Ile Ala Glu Met Gly Lys Pro Val Leu Gly Glu Asn Cys		
675	680	685
Arg Leu Glu Val Ile Ile Glu Glu Ser Tyr Asp Phe Lys Asn Thr Val		
690	695	700
Asp Lys Leu Ile Lys Lys Thr Asn Leu Ala Leu Val Ile Gly Thr His		
705	710	715
Ser Trp Arg Glu Gln Phe Leu Glu Ala Ile Thr Val Ser Ala Gly Asp		
725	730	735
Glu Glu Glu Glu Glu Asp Gly Ser Arg Glu Glu Arg Leu Pro Ser Cys		
740	745	750
Phe Asp Tyr Val Met His Phe Leu Thr Val Phe Trp Lys Val Leu Phe		
755	760	765
Ala Cys Val Pro Pro Thr Glu Tyr Cys His Gly Trp Ala Cys Phe Gly		
770	775	780
Val Ser Ile Leu Val Ile Gly Leu Leu Thr Ala Leu Ile Gly Asp Leu		
785	790	795
Ala Ser His Phe Gly Cys Thr Val Gly Leu Lys Asp Ser Val Asn Ala		
805	810	815
Val Val Phe Val Ala Leu Gly Thr Ser Ile Pro Asp Thr Phe Ala Ser		
820	825	830
Lys Val Ala Ala Leu Gln Asp Gln Cys Ala Asp Ala Ser Ile Gly Asn		
835	840	845
Val Thr Gly Ser Asn Ala Val Asn Val Phe Leu Gly Leu Gly Val Ala		
850	855	860
Trp Ser Val Ala Ala Val Tyr Trp Ala Val Gln Gly Arg Pro Phe Glu		
865	870	875
Val Arg Thr Gly Thr Leu Ala Phe Ser Val Thr Leu Phe Thr Val Phe		
885	890	895
Ala Phe Val Gly Ile Ala Val Leu Leu Tyr Arg Arg Arg Pro His Ile		
900	905	910
Gly Gly Glu Leu Gly Gly Pro Arg Gly Pro Lys Leu Ala Thr Thr Ala		
915	920	925
Leu Phe Leu Gly Leu Trp Leu Leu Tyr Ile Leu Phe Ala Ser Leu Glu		

930 935 940
 Ala Tyr Cys His Ile Arg Gly Phe
 945 950

<210> 2523
 <211> 392
 <212> DNA
 <213> Homo sapiens

<400> 2523
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 ttcagccgaa aaattgttgg tgttgctaca cgctcgacga tgcgtaccga tgcgctgccc
 120
 atggaggctt tggagcatgc gttaacgact gcagggcgaa ttcattggaaa ccagttaatt
 180
 caccatagcg atcggggcag ccagtacgtg tcaactgaagt attccaccgc gtttagcggaa
 240
 tccggaatcc gtccgagtgt gggaacagtc ggcgattctt atgacaatgc tctagccgaa
 300
 acagtcaacg gtctctacaa ggcggaactg attcatgccc aagggtccgtg gacgtcggtc
 360
 ggagaagtcg aattggccac cttgcggnnn nn
 392

<210> 2524
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2524
 Xaa Ile Thr Tyr Val Arg Thr Leu Ser Gly Phe Ala Tyr Thr Ala Phe
 1 5 10 15
 Val Val Asp Val Phe Ser Arg Lys Ile Val Gly Val Ala Thr Arg Ser
 20 25 30
 Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu
 35 40 45
 Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp
 50 55 60
 Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu
 65 70 75 80
 Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn
 85 90 95
 Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His
 100 105 110
 Ala Gln Gly Pro Trp Thr Ser Val Gly Glu Val Glu Leu Ala Thr Leu
 115 120 125
 Arg Xaa
 130

<210> 2525
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 2525

acgcgttctc gggcgagggc atcgagatt tcgaatgcac ggtgatggcg gtgtgccgca
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tcccccttga atacgtggtg ctgtcacgcg cgcggaatc aagaaccgca cggtgcgcaa
120
atcgctgcgc tacgcaccaa cgtggtcggc aagatgttgg tcagcggcga gccccgnaa
180
tgattcatat ctccgatatc agcacgacag gggcgtcatt ccgctctgca catcggcttg
240
gaagtcagcg gtgcgcccgc acgectgcga tttcgggtga agacgcgcga ctaccattca
300
gaactgggtg ccgcaacact cattcgcagc gagaagcccg ccgatttgcc caacacctat
360
caatacggcg tggaattc
378

<210> 2526

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2526

Met	Ala	Val	Cys	Arg	Ile	Pro	Phe	Glu	Tyr	Val	Val	Leu	Ser	Pro	Pro
1				5					10					15	
Arg	Glu	Ser	Arg	Thr	Ala	Arg	Cys	Ala	Asn	Arg	Cys	Ala	Thr	His	Gln
			20				25					30			
Arg	Gly	Arg	Gln	Asp	Val	Gly	Gln	Arg	Arg	Ala	Pro	Xaa	Met	Ile	His
			35				40					45			
Ile	Ser	Asp	Ile	Ser	Thr	Thr	Gly	Ala	Ser	Phe	Arg	Ser	Ala	His	Arg
	50				55				60						
Leu	Gly	Ser	Gln	Arg	Cys	Ala	Arg	Thr	Pro	Ala	Ile	Ser	Gly	Glu	Asp
65				70					75					80	
Ala	Arg	Leu	Pro	Phe	Arg	Thr	Gly	Gly	Arg	Asn	Thr	His	Ser	Gln	Arg
			85				90					95			
Glu	Ala	Arg	Arg	Phe	Ala	Gln	His	Leu	Ser	Ile	Arg	Arg	Gly	Ile	
			100				105					110			

<210> 2527

<211> 305

<212> DNA

<213> Homo sapiens

<400> 2527

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120
cgccctctccc cccagaagc tcccgacagg cccaccatct ccacggcctc cgagacctca
180
gtgtacgtga cctggattcc ccgtgggaat ggtgggttcc caatccagtc cttccgtgtg
240
gagtacaaga agctaaagaa agtgggagac tggattcttg ccaccagcgc catcccccca
300

cgcgt
305

<210> 2528
<211> 101
<212> PRT
<213> Homo sapiens

<400> 2528
Xaa Val Thr Phe Arg Met Gly Arg Arg Pro Lys Pro Glu Ile Met Ala
1 5 10 15
Ser Lys Glu Gln Gln Ile Gln Arg Asp Asp Leu Gly Ala Ser Pro Gln
20 25 30
Ser Ser Ser Gln Pro Asp His Gly Arg Leu Ser Pro Pro Glu Ala Pro
35 40 45
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr
50 55 60
Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val
65 70 75 80
Glu Tyr Lys Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser
85 90 95
Ala Ile Pro Pro Arg
100

<210> 2529
<211> 387
<212> DNA
<213> Homo sapiens

<400> 2529
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tgtgtctctcc gtgccccccg agtggcctgc tagcccgctc tccacacag tctccttgat
120
gtgaagtgtc acccggttg ctgcggcgtg tctccgcgt aacacgtgta taccggtca
180
gccatggcgg cggtgctgg gaaggctcct gcgtatggct ttgccatccg ggaccggggc
240
tttgcctgc aggggtgggc ttctgagcag aggaaggcca gaggtaacca ggtccatgca
300
cgtttgtgtc ttccacaat gtcgggcttt tatggatgct tttagtctca gtcacaaaag
360
ccatgagctc cacaggttcc tgaggga
387

<210> 2530
<211> 121
<212> PRT
<213> Homo sapiens

<400> 2530
Met Ala Phe Val Thr Glu Thr Lys Ser Ile His Lys Ser Pro Thr Leu
1 5 10 15
Trp Lys Asp Thr Asn Val His Gly Pro Gly Tyr Leu Trp Pro Ser Ser

20 25 30
 Ala Gln Lys Pro Thr Pro Ala Glu Gln Ser Pro Gly Pro Gly Trp Gln
 35 40 45
 Ser His Thr Gln Glu Pro Ser Gln Gln Pro Pro Pro Trp Leu Ser Arg
 50 55 60
 Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr
 65 70 75 80
 Ser His Gln Gly Asp Cys Val Gly Glu Arg Ala Ser Arg Pro Leu Gly
 85 90 95
 Gly His Gly Gly His Arg Glu Arg Leu Gln Trp Gln Ser Arg Pro Gly
 100 105 110
 Asp Arg Asp Pro Pro Arg Gly Asp Ala
 115 120

<210> 2531

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2531

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 120
 ctcctcagca gccctggaga tgacaaagat agtgctgagg gggaacagac cttcgtcatc
 180
 agttaagat atgctagctt ttctttttct tccagacatt cctgaatcca gagaactttc
 240
 ctgtaatgcg tcaaactcct taggtctcaa ttctttccct agagagacaa ggagcacagt
 300
 tcgttcccaa ggccccccat gcttggcgag ggcgtctctg ctttccaggc agggctctgc
 360
 tgcctccacc cacgtgcagg gaaaggaagg acgcgt
 396

<210> 2532

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2532

Met Thr Arg Leu Asn Pro Lys Ser Leu Gln Leu Cys Val Ile Ser Ser
 1 5 10 15
 Ala Ala Leu Glu Met Thr Lys Ile Val Leu Arg Gly Asn Arg Pro Ser
 20 25 30
 Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro
 35 40 45
 Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn
 50 55 60
 Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro
 65 70 75 80
 Cys Leu Ala Arg Ala Ser Leu Leu Ser Arg Gln Gly Pro Ala Ala Ser
 85 90 95
 Thr His Val Gln Gly Lys Glu Gly Arg

100

105

<210> 2533

<211> 495

<212> DNA

<213> Homo sapiens

<400> 2533

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gctgtggcan ccccatgga cgtgatcaag tcgagactgc aggcagacgg gcagggccag
120

aggcgctacc ggggtctcct gcactgtatg gtgaccagcg ttcgagagga gggaccccg
180

gtccttttca aggggctggt actcaattgc tgccgcgcct tccctgtcaa catggtggtc
240

ttcgtcgctt atgaggcagt gctgaggctc gcccggggctc tgctcacata gccggctccc
300

acgcccagcg gccacccac cagcagctgc tggaggctcgt agtggtctga ggaggcaagg
360

ggtagtgtgg ctgggttcgg gacccacag ggccattgcc caggagaatg aggagcctcc
420

ctgcagtgtt gtgcggcgag gcctgagctc gccctgccca gctactgacc tcaggctcag
480

gggcccgcga gccat
495

<210> 2534

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2534

Xaa Arg Pro Asp Val Pro Gly Val Leu Val Ala Gly Gly Cys Ala Gly
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Val Leu Ala Trp Ala Val Ala Xaa Pro Met Asp Val Ile Lys Ser Arg
20 25 30

Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His
35 40 45

Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys
50 55 60

Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val
65 70 75 80

Phe Val Ala Tyr Glu Ala Val Leu Arg Leu Ala Arg Gly Leu Leu Thr
85 90 95

<210> 2535

<211> 1904

<212> DNA

<213> Homo sapiens

<400> 2535

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120
gtggtccttg taccctacac ctccgagcat gtgccagca ggtaccacga gtggatgaaa
180
tcagaggagc tgcagcgttt gacagcctcg gagccgctga ccctggagca ggagtatgcc
240
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300
aagtggcagg ccagccagg cgccaccgaa gagagctga tgggtggaga cgtgaacctc
360
ttcctcacag atctagaaga cccacacctg ggggagatcg aggtcatgat tgcagagccc
420
agctgcaggg gtaagggcct tggcactgag gccgttctcg cgatgctgtc ttacggagtg
480
accagctag gtctgaccaa gtttgaggct aaaattgggc aaggaaatga accaagcatc
540
cggatgttcc agaaaacttca ctttgagcag gtggctacga gcagtgtttt tcaggagggtg
600
accctcagac tgacagtga tgagtccgag catcagtggc ttctggagca gaccagccac
660
gtggaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttggtg
720
ggcagccact ctgtgtgagc aggggtgttg gcccatacac ttcaaagacc agagccctgc
780
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840
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900
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1080
tgggagtga gctccaggca ctaccagctt tctgatttt cccgtttggt ccatgtgaag
1140
agctaccacg agccccagcc tcacagtgtc cactcaaggg cagcttggtc ctcttgctc
1200
gcagaggcag gctggtgtga ccctgggaac ttgacctggg aacaacaggt ggtccagagt
1260
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1320
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1440
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1500
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1560
ggctacctgg caccctatgg cttacaaagt agagtggcc cagtttctt ccacctgag
1620
ggagcactct gactcctaac agtcttctt gccctgccat catctggggg ggctggctgt
1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggcttgtagg gcattctcca
 1740
 ggtggggaaa cagtcttaga taagtaaggt gacttgcccta aggcctccca gcacccttga
 1800
 tcttgagtc tcacagcaga ctgcatgtga acaactggaa ccgaaaacat gctcagtat
 1860
 aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaaa tact
 1904

<210> 2536

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2536

Met	Arg	Leu	Asn	Gln	Asn	Thr	Leu	Leu	Leu	Gly	Lys	Lys	Val	Val	Leu
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Val	Pro	Tyr	Thr	Ser	Glu	His	Val	Pro	Ser	Arg	Tyr	His	Glu	Trp	Met
			20					25					30		
Lys	Ser	Glu	Glu	Leu	Gln	Arg	Leu	Thr	Ala	Ser	Glu	Pro	Leu	Thr	Leu
		35					40					45			
Glu	Gln	Glu	Tyr	Ala	Met	Gln	Cys	Ser	Trp	Gln	Glu	Asp	Ala	Asp	Lys
	50					55				60					
Cys	Thr	Phe	Ile	Val	Leu	Asp	Ala	Glu	Lys	Trp	Gln	Ala	Gln	Pro	Gly
65					70				75					80	
Ala	Thr	Glu	Glu	Ser	Cys	Met	Val	Gly	Asp	Val	Asn	Leu	Phe	Leu	Thr
				85					90					95	
Asp	Leu	Glu	Asp	Pro	Thr	Leu	Gly	Glu	Ile	Glu	Val	Met	Ile	Ala	Glu
			100					105					110		
Pro	Ser	Cys	Arg	Gly	Lys	Gly	Leu	Gly	Thr	Glu	Ala	Val	Leu	Ala	Met
		115					120					125			
Leu	Ser	Tyr	Gly	Val	Thr	Thr	Leu	Gly	Leu	Thr	Lys	Phe	Glu	Ala	Lys
	130					135					140				
Ile	Gly	Gln	Gly	Asn	Glu	Pro	Ser	Ile	Arg	Met	Phe	Gln	Lys	Leu	His
145					150					155				160	
Phe	Glu	Gln	Val	Ala	Thr	Ser	Ser	Val	Phe	Gln	Glu	Val	Thr	Leu	Arg
			165						170					175	
Leu	Thr	Val	Ser	Glu	Ser	Glu	His	Gln	Trp	Leu	Leu	Glu	Gln	Thr	Ser
		180						185					190		
His	Val	Glu	Glu	Lys	Pro	Tyr	Arg	Asp	Gly	Ser	Ala	Glu	Pro	Cys	
		195					200					205			

<210> 2537

<211> 509

<212> DNA

<213> Homo sapiens

<400> 2537

acgcgttctc gtaaggacaa gcttgacgcc gaggtgcatg ccggtgaagg ccccccggg
 60
 gatgtcatcg tgctgcggtt ttccggagcc atggcgaagc gtctgcctc agttatcctt
 120
 ccgctgctac tgctggactc ccccgctatt gcgtgggtggc ccttctccgg ccttgacaac
 180

ctcgctcgg accccatcgg agcccttgcg gaccgccgca tcaccgactc ggcagctgac
 240
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac
 300
 ctgtgttggg ctgcaccac cagctggaga gccctagctg cagcagcttt ggatcaacat
 360
 ccagcgaccg tcaagttcgc tcgggtagag tcagccgcg gtaatgcgcc ggcgatgctg
 420
 ctggcagcct ggctaggatt gcgtctcggc gtcccggctg agcgggtgac aaccgacgcg
 480
 cccggcatct ccgcgatcgt catgtcgac
 509

<210> 2538

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2538

Thr	Arg	Ser	Arg	Lys	Asp	Lys	Leu	Asp	Ala	Glu	Val	His	Ala	Gly	Glu
1				5					10					15	
Gly	Thr	Pro	Gly	Asp	Val	Ile	Val	Leu	Arg	Phe	Ser	Gly	Ala	Met	Ala
		20					25						30		
Lys	Arg	Pro	Ala	Ser	Val	Ile	Leu	Pro	Leu	Leu	Leu	Ser	Asp	Ser	Pro
		35					40					45			
Val	Ile	Ala	Trp	Trp	Pro	Phe	Ser	Gly	Pro	Asp	Asn	Leu	Ala	Ser	Asp
	50					55				60					
Pro	Ile	Gly	Ala	Leu	Ala	Asp	Arg	Arg	Ile	Thr	Asp	Ser	Ala	Ala	Asp
65				70				75					80		
Lys	Asp	Pro	Cys	Lys	Ala	Leu	Ile	Arg	Arg	Ala	Ala	His	Leu	Thr	Glu
			85					90					95		
Gly	Asp	Ser	Asp	Leu	Cys	Trp	Ala	Arg	Thr	Thr	Ser	Trp	Arg	Ala	Leu
		100					105						110		
Ala	Ala	Ala	Ala	Leu	Asp	Gln	His	Pro	Ala	Thr	Val	Lys	Phe	Ala	Arg
		115					120					125			
Val	Glu	Ser	Ala	Ala	Gly	Asn	Ala	Pro	Ala	Met	Leu	Leu	Ala	Ala	Trp
	130					135				140					
Leu	Gly	Leu	Arg	Leu	Gly	Val	Pro	Val	Glu	Arg	Val	Thr	Thr	Asp	Ala
145				150					155					160	
Pro	Gly	Ile	Ser	Ala	Ile	Val	Met	Ser							
							165								

<210> 2539

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2539

aagcttctac tgccgcgagc acgtcgtcca ccgtcgaggt catggttcta gtttgccgcg
 60
 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcgttt tctcaacgag
 120
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaaccg ttcctcgggtg
 180

ggggcccgca tgaacgtcga cctcacgtca acagacgggc taggcaactcc tctgccctc
 240
 gtagtggcca atatgaccgc aatttcgga cgtcgcattg cagagaccat cgccaggcgc
 300
 ggaggcattg ctgttctgcc ccaagatata ccggcggatt tcgtcgcccg gtccattcgg
 360
 cgcgtcaaag atgcgcatac tcgattcgac accccagtca ccgtcaaccc gacaacgact
 420
 gtcggtgagg ccatgaactt gctcaacaag cgc
 453

<210> 2540

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2540

Phe	Ala	Ala	Ser	Arg	His	Asp	Pro	Arg	Ile	Val	Thr	Trp	Asp	Asn	Gly
1				5					10					15	
Tyr	Val	Arg	Phe	Leu	Asn	Glu	Gln	Pro	Asn	Tyr	Asp	Leu	Thr	Tyr	Asp
			20					25					30		
Asp	Val	Phe	Met	Ala	Pro	Asn	Arg	Ser	Ser	Val	Gly	Ser	Arg	Met	Asn
		35					40					45			
Val	Asp	Leu	Thr	Ser	Thr	Asp	Gly	Leu	Gly	Thr	Pro	Leu	Pro	Leu	Val
	50					55					60				
Val	Ala	Asn	Met	Thr	Ala	Ile	Ser	Gly	Arg	Arg	Met	Ala	Glu	Thr	Ile
65				70					75					80	
Ala	Arg	Arg	Gly	Gly	Ile	Ala	Val	Leu	Pro	Gln	Asp	Ile	Pro	Ala	Asp
			85						90					95	
Phe	Val	Ala	Arg	Ser	Ile	Arg	Arg	Val	Lys	Asp	Ala	His	Thr	Arg	Phe
			100					105					110		
Asp	Thr	Pro	Val	Thr	Val	Asn	Pro	Thr	Thr	Thr	Val	Gly	Glu	Ala	Met
		115					120					125			
Asn	Leu	Leu	Asn	Lys	Arg										
			130												

<210> 2541

<211> 564

<212> DNA

<213> Homo sapiens

<400> 2541

accggtctcc cacggagttc tgtttctca ggtactgcac tgtatacaac tctaaatgca
 60
 ccttgcattg aaccattgc agggcacacg cagtctacat gtatcccagg ttttatgctc
 120
 acagagcctg caatactccg tgtctggaat acgttatattg ctgcacacct cccagaggaa
 180
 catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaac
 240
 actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc atttgtact
 300
 caaatattcg gcttcataa caagttacat tgctcacatc ttaaaatatt cattacacgt
 360

gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt
 420
 gcacagttct cactgttctg cgtgccccagc ccttcacact ggacgcccac ctcacactct
 480
 tctgccaagg gagactttgg ttctcccctt cctgtgtctg gctgtgcggg ccacagtctt
 540
 ctgcacgcca gcagcatgac gcgt
 564

<210> 2542

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2542

Met	Leu	Cys	Thr	His	Phe	Leu	Ile	Phe	Cys	Val	Glu	Ser	Thr	Ser	Phe
1				5					10					15	
Cys	Thr	Gln	Ile	Phe	Gly	Phe	His	Asn	Lys	Leu	His	Cys	Ser	His	Leu
		20					25						30		
Lys	Ile	Phe	Ile	Thr	Arg	Glu	Thr	Ala	Trp	Tyr	Arg	His	Pro	Ser	
		35				40					45				
Gly	Met	Ser	Arg	Thr	Glu	Ala	Asp	Ile	Cys	Ala	Gln	Phe	Ser	Leu	Phe
	50					55					60				
Cys	Val	Pro	Ser	Pro	Ser	His	Trp	Thr	Pro	Thr	Ser	His	Ser	Ser	Ala
65					70					75				80	
Lys	Gly	Asp	Phe	Gly	Ser	Pro	Leu	Pro	Cys	Ala	Gly	Cys	Ala	Gly	His
			85					90						95	
Ser	Pro	Leu	His	Ala	Ser	Ser	Met	Thr	Arg						
			100					105							

<210> 2543

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2543

cgccctgaagg gggcggggaa aatggaatgg gggggaaggg cgcggtggg gacatgctgg
 60
 aacgtgccca tgctttctgc accacactgg atgactgaag gggaaggaa gagcgtctta
 120
 ccgctcctga tgagattttt gtttttgcct aacaaagaaa tgtgtatgaa tgcacgtctg
 180
 tttgcagggg cagggaggag gagggctcctt ggaatagctg ccgacaacag ctggaactcc
 240
 tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag
 300
 gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gccctgtcc
 360
 aatggggccc agcaggcagc agtgctg
 387

<210> 2544

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2544

Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1 5 10 15
 Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
 20 25 30
 Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
 35 40 45
 Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly
 50 55 60
 Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
 65 70 75 80
 Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
 85 90 95
 Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
 100 105 110
 Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
 115 120

<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

gcgattatatt tcgtgctgcc cggacttatac atggtcggct ggtggtcagg tttcccgtac
 60
 tggaccacccc tcgtatatctg tctagtcggc ggcatacctcg gcgttatgta ctcgattccg
 120
 ctgcgtcggg ccctcgtgac aggctcggat cttccctacc cggagggcgt cgcaggagct
 180
 gaggtgctca aagtaggcga ttccgctggt gccgccgagg ctaacaaggt gggctctgcga
 240
 gtcacatcgc tcggttctgt ggtctctgca gcgtacgccc tgttgctcgga tcttaagctt
 300
 gtgaagtcgg cgctgaccaa gcctttcaag acgggc
 336

<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1 5 10 15
 Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
 20 25 30
 Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
 35 40 45
 Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
 50 55 60
 Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

65		70		75		80									
Val	Ile	Ile	Val	Gly	Ser	Val	Val	Ser	Ala	Ala	Tyr	Ala	Leu	Leu	Ser
			85					90					95		
Asp	Leu	Lys	Leu	Val	Lys	Ser	Ala	Leu	Thr	Lys	Pro	Phe	Lys	Thr	Gly
			100					105					110		

<210> 2547
 <211> 556
 <212> DNA
 <213> Homo sapiens

<400> 2547
 acgcgtgcac acacacacac gcaggcgtac acgctcaca gtcacacac acatatgagt
 60
 ttccacaca ttcaccata tcactttctc ttacttttt aaagacaggg cacttgcctt
 120
 tatggccaat aatattatgc ccaagctaca acattccgag tcaatcaca aggttataaa
 180
 cttcatttga actgaagacc acctgtaagc acgcagctca aatgtttctca cctagaaatt
 240
 caagtttgtt ttggaaagtg gacttaacgg tcaaagaaaa aggcttgccc aacttcagag
 300
 agggacaccc agccctgcta cgttgcgtgt cattatgtgg tgctgtgcta tccatagaga
 360
 aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
 420
 catcaccaca atatgaaggc ctcttggta taaatgactt ttttaggtcc caataagaaa
 480
 taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac
 540
 tatcagatca tctaga
 556

<210> 2548
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2548
 Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
 1 5 10 15
 Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
 20 25 30
 Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
 35 40 45
 Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
 50 55 60
 Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
 65 70 75 80
 Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
 85 90 95
 Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
 100 105

<210> 2549

<211> 435

<212> DNA

<213> Homo sapiens

<400> 2549

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nnccagcctc tctccgaccg cgtacgtatt gaatttgata aagaagccaa cacgggtgtt
60
atcgatgata atgggtgctgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt
120
gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc
180
caacttattg gtcaattcgg tgtaggcttt tactctgctt tcatcggtgc tgataaagta
240
acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgctg ggtatctgat
300
ggttctggtg aatttactat tgagacgacg gataaagcga ctcgtggtac acgcattact
360
ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta
420
acaaaatatt ctgat
435

```

<210> 2550

<211> 145

<212> PRT

<213> Homo sapiens

<400> 2550

```

Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala
1      5      10      15
Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu
20     25     30
Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe
35     40     45
Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly
50     55     60
Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val
65     70     75     80
Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg
85     90     95
Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys
100    105    110
Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys
115    120    125
Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser
130    135    140
Asp
145

```

<210> 2551

<211> 403

<212> DNA

<213> Homo sapiens

<400> 2551

nngccggcca gcctcacatc agtctctccg ccccggggaa ggctcagcac tttaaatega
 60
 ggactccact tctggggagc cctggttcgt tcgcccacca ggcttaggct acgtccatg
 120
 ctccccagc aatctctgtc tacacctctc gcggcgccct gcctctctcc gaccctttc
 180
 cagccannaa gtccccccac ccttcagag aagcagcctc aaattccaga agtggaggct
 240
 ccagcctccc cgcgaggtag cagccccaca gtcttctggg agccattgtg gccagggagc
 300
 gcctctggac tgccaggctg ggttggggac caggggaacat cggctctactc aggtgtgagg
 360
 gggcaggtct ggctgcccc aaagttggct ccattctgga can
 403

<210> 2552

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2552

Xaa Pro Ala Ser Leu Thr Ser Val Ser Pro Pro Arg Gly Arg Leu Ser
 1 5 10 15
 Thr Leu Asn Arg Gly Leu His Phe Trp Gly Arg Leu Val Arg Ser Pro
 20 25 30
 Thr Arg Pro Arg Leu Arg Ser Met Leu Pro Gln Gln Ser Leu Ser Thr
 35 40 45
 Pro Pro Ala Ala Pro Cys Pro Pro Thr Pro Phe Gln Pro Xaa Ser
 50 55 60
 Pro Pro Thr Pro Ser Glu Lys Gln Pro Gln Ile Pro Glu Val Glu Ala
 65 70 75 80
 Pro Ala Ser Pro Arg Gly Thr Ser Pro Thr Val Phe Trp Glu Pro Leu
 85 90 95
 Trp Pro Gly Thr Ala Ser Gly Leu Pro Gly Trp Val Gly Asp Gln Gly
 100 105 110
 Thr Ser Val Tyr Ser Gly Val Arg Gly Gln Val Trp Pro Ala Pro Lys
 115 120 125
 Leu Ala Pro Ser Trp Thr
 130

<210> 2553

<211> 380

<212> DNA

<213> Homo sapiens

<400> 2553

actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg
 60
 gagagataca gcatgggcca aggagcactg ggagccagca gcagctggaa gaggcaggag
 120
 gcatcctccc tagaccgcac aggatgtctac tgggtgagcc tgctgtcctg gaaaaggcgt
 180

gaagtctgcc tgagtgggca ggggcttctg cgcagcaccc agcaaggcca aggtggaagg
 240
 gacctctctg gcccctgtcc tggtccacc ctcagctgct ggcaggtggg tcaccagccc
 300
 tctgccccaaa gaaactcctg caggcagctc tggacccct gtcttacaca ccttctcact
 360
 gagcctgcca gcatcccagn
 380

<210> 2554

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2554

Met	Lys	Gln	Arg	Leu	Glu	Arg	Tyr	Ser	Met	Gly	Gln	Gly	Ala	Leu	Gly
1				5				10						15	
Ala	Ser	Ser	Ser	Trp	Lys	Arg	Gln	Glu	Ala	Ser	Ser	Leu	Asp	Arg	Thr
			20					25					30		
Gly	Cys	Tyr	Trp	Val	Ser	Leu	Leu	Ser	Trp	Lys	Arg	Arg	Glu	Val	Cys
		35					40					45			
Leu	Ser	Gly	Gln	Gly	Leu	Leu	Arg	Ser	Thr	Gln	Gln	Gly	Gln	Gly	Gly
		50					55				60				
Arg	Asp	Pro	Pro	Gly	Pro	Cys	Pro	Gly	Ser	Thr	Leu	Ser	Cys	Trp	Gln
65					70					75					80
Val	Gly	His	Gln	Ala	Ser	Ala	Gln	Arg	Asn	Ser	Cys	Arg	Gln	Leu	Trp
			85						90					95	
Thr	Pro	Cys	Leu	Thr	His	Leu	Leu	Thr	Glu	Pro	Ala	Ser	Ile	Pro	
			100					105					110		

<210> 2555

<211> 368

<212> DNA

<213> Homo sapiens

<400> 2555

ntccgatgg aaaagtaaag accagcaata gccataacg ccattaacac atacccatat
 60
 atgttgtaa tgctgcccg tagttcgggtg gcattcttca tgggcaatag tttaatggga
 120
 gataacgga ataatggtag tgctgttcta gtgtcacag acctgggtcac ccaaatagaa
 180
 ggatttatat cctcccatat cctcattttt gtgtcggttg gcctcggtcat tgtctttacc
 240
 gttgccactc gaggtgtaca gttccgcctc ttcgggcaca tgtggcacct catgctcgat
 300
 tcacggaagc aaaagggcac ctcctctccc agctctcaag cattcacagt gggctctcgat
 360
 cacgcggn
 368

<210> 2556

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2556

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Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1             5             10             15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
      20             25             30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
      35             40             45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
      50             55             60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
      65             70             75             80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
      85             90             95
Val Gly Leu Asp His Ala
      100

```

<210> 2557

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2557

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atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtagccg
60
attgatgaga tgggcccagt taacgcgaaa gaaaaatggg aaattcaccg tccagtcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtagctgat
180
cttcttgca cttacgcaaa gggtaggcaag atcgggtctct tcggtaggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacg tggatactct
300
gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcggtc agatgaat
408

```

<210> 2558

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1             5             10             15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
      20             25             30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
      35             40             45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
      50             55             60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

```

65          70          75          80
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His
          85          90          95
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly
          100          105          110
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr
          115          120          125
Ala Leu Val Phe Gly Gln Met Asn
          130          135

```

<210> 2559

<211> 389

<212> DNA

<213> Homo sapiens

<400> 2559

```

tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa ttgcgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

```

<210> 2560

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2560

```

Ser Leu Lys Met Asn Ile Phe Arg Leu Gln Thr Glu Lys Asp Leu Asn
1          5          10          15
Pro Gln Lys Thr Ala Phe Leu Lys Asp Arg Leu Asn Ala Ile Gln Glu
          20          25          30
Glu His Ser Lys Asp Leu Lys Leu Leu His Leu Glu Val Met Asn Leu
          35          40          45
Arg Gln Gln Leu Arg Ala Val Lys Glu Glu Glu Asp Lys Ala Gln Asp
          50          55          60
Glu Val Gln Arg Leu Thr Ala Thr Leu Lys Ile Ala Ser Gln Thr Lys
65          70          75          80
Lys Asn Ala Ala Ile Ile Glu Glu Glu Leu Lys Thr Thr Lys Arg Lys
          85          90          95
Met Asn Leu Lys Ile Gln Glu Leu Leu Glu Met Thr Ser Phe Pro Ser
          100          105          110
Trp Leu Lys Lys Ile Arg Thr Cys Arg Ile Ser Phe Asn Arg Asn Met
          115          120          125
Lys

```

<210> 2561
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 2561
 nnactcacca ctgtggttct actatgcctt ctgaccccg tttggacttc aactgggaga
 60
 atgtggagcc atttgaacag gctcctcttc tggagcatat tttcttctgt cacttgtaga
 120
 aaagctgtat tggattgtga ggcaatgaaa acaaatgaat tcccttctcc atgtttggac
 180
 tcaaagacta aggtgggttat gaagggtcaa aatgtatcta tgttttgttc ccataagaac
 240
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aacctcaggat
 300
 ggaaaagggtg aacctgcat ttttaaccta agcatcacag aagcccatga atcaggcccc
 360
 tacaaatgca aagcccaagt taccagctgt tcaaaataca gtcgtgactt cagcttcacg
 420
 attgtcgac
 429

<210> 2562
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2562
 Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr
 1 5 10 15
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser
 20 25 30
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala
 35 40 45
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys
 50 55 60
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn
 65 70 75 80
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu
 85 90 95
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile
 100 105 110
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr
 115 120 125
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp
 130 135 140

<210> 2563
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 2563

ggatcccaga cgagtgtg cagcagtatg ggggccgtgg gggcgacggc caccgtcagc
 60
 accccgggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt
 120
 aaggccttta ccctttggga acaggcagag gccctcacia ggaagaacaa agaattcttt
 180
 gctcagctca gcacaaaagt gcgcgtgttg gccctcaaca gcagcctggt ggacctgggtg
 240
 cactacacaa ggcagggcct ccagcgg
 267

<210> 2564

<211> 89

<212> PRT

<213> Homo sapiens

<400> 2564

Gly	Ser	Gln	Thr	Ser	Ala	Gly	Ser	Ser	Met	Gly	Ala	Val	Gly	Ala	Thr
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Ala	Thr	Val	Ser	Thr	Pro	Val	Thr	Ile	Gln	Asn	Met	Thr	Ser	Ser	Tyr
		20					25					30			
Val	Thr	Ile	Thr	Ser	His	Val	Leu	Lys	Ala	Phe	Thr	Leu	Trp	Glu	Gln
		35				40					45				
Ala	Glu	Ala	Leu	Thr	Arg	Lys	Asn	Lys	Glu	Phe	Phe	Ala	Gln	Leu	Ser
	50					55				60					
Thr	Lys	Val	Arg	Val	Leu	Ala	Leu	Asn	Ser	Ser	Leu	Val	Asp	Leu	Val
65					70				75				80		
His	Tyr	Thr	Arg	Gln	Gly	Leu	Gln	Arg							
					85										

<210> 2565

<211> 333

<212> DNA

<213> Homo sapiens

<400> 2565

cttcgcactg ctccgcgagt tcttggggga gtgagcacag cgcgtaagct cagccacgtg
 60
 tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc ccccccgat
 120
 gggccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc
 180
 gacatgcgcc agttgcagca actcgggtgc tccgatgtgg tcgatctgcg ttccacctat
 240
 gaggtggcca gcgagggccc ggggccgctg accgggctg gggtgaccat ccacccccat
 300
 tccttcctgc ccgaccagca cgccaatgtg cac
 333

<210> 2566

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2566

Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys
 1 5 10 15
 Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp
 20 25 30
 Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu
 35 40 45
 Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln
 50 55 60
 Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr
 65 70 75 80
 Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr
 85 90 95
 Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His
 100 105 110

<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

ngaattcaaaa ctggtgttcg tatgggcat aagcaaggta catatacgat gcgttttaga
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 agccagttca cagatcaacg tctattcgga accgatcaat ttagtattgg tgggcgctat
 120
 tctgtacgag gtttttagtgg agaagaaacc ttaagaggtg actcgggcta ttatgtacaa
 180
 aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt
 240
 ggacatgtat gggggccatc tacagaaact caattaggtg ataccttaat tgggtggtga
 300
 gttggtgtac gtggtatggt tggtgacgat gtaaactatg atgtatcact aggaacacca
 360
 attaagaaac cagaaggttt tgatacagat acgcgt
 396

<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr
 1 5 10 15
 Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp
 20 25 30
 Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu
 35 40 45
 Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala
 50 55 60
 Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

65 70 75 80
 Gly His Val Trp Gly Pro Ser Thr Glu Thr Gln Leu Gly Asn Thr Leu
 85 90 95
 Ile Gly Gly Val Val Gly Val Arg Gly Met Val Gly Asp Asp Val Asn
 100 105 110
 Tyr Asp Val Ser Leu Gly Thr Pro Ile Lys Lys Pro Glu Gly Phe Asp
 115 120 125
 Thr Asp Thr Arg
 130

<210> 2569

<211> 330

<212> DNA

<213> Homo sapiens

<400> 2569

cttgctgctg gtgctgatgt gtccatgatt ggccagttcg gcgtcggttt ctactctgcc
 60
 tacctcgctg ccgatagagt tgctgtgacc accaagcaca acgatgacga gcagtacgtg
 120
 tgggagtcce aagcgggagg gtcgttcact gttactcgtg acacgtcagg ggagcagctt
 180
 ggcaggggca ctaagatcac actgttcctc aaggacgatc agctggagta ccttgaggag
 240
 cgtcgccctca aggatctggt caagaagcac tctgagttca tcagctaccc catctccctg
 300
 tggactgaaa agacaacaga gaaggaaatt
 330

<210> 2570

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2570

Leu Ala Ala Gly Ala Asp Val Ser Met Ile Gly Gln Phe Gly Val Gly
 1 5 10 15
 Phe Tyr Ser Ala Tyr Leu Val Ala Asp Arg Val Val Val Thr Thr Lys
 20 25 30
 His Asn Asp Asp Glu Gln Tyr Val Trp Glu Ser Gln Ala Gly Gly Ser
 35 40 45
 Phe Thr Val Thr Arg Asp Thr Ser Gly Glu Gln Leu Gly Arg Gly Thr
 50 55 60
 Lys Ile Thr Leu Phe Leu Lys Asp Asp Gln Leu Glu Tyr Leu Glu Glu
 65 70 75 80
 Arg Arg Leu Lys Asp Leu Val Lys Lys His Ser Glu Phe Ile Ser Tyr
 85 90 95
 Pro Ile Ser Leu Trp Thr Glu Lys Thr Thr Glu Lys Glu Ile
 100 105 110

<210> 2571

<211> 335

<212> DNA

<213> Homo sapiens

<400> 2571

gaattcgcca atgttttctc cggatatgggc tccacagtaa cccttatcgg cgcgtcccct
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gtgctcctta aacatctcga taatgaacta tctgagctct ttactgagat cgcctcggag
120
aaatgggatg tccgttttagg gcagggaacg acagctatcg accaggtgga gaagcagcgt
180
gaagatgggt cttcctactt cgaaccacc attacatttg aagacggcag cactgttacc
240
ggtgacgcat tcttagttgc taccggacgt acccctaaca ccgaccgct tggcctcgac
300
aatggttccg gtgtgaagggt tgaaagggga cgcgt
335

<210> 2572

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2572

Glu	Phe	Ala	Asn	Val	Phe	Ser	Gly	Met	Gly	Ser	Thr	Val	Thr	Leu	Ile
1			5					10						15	
Gly	Arg	Ser	Pro	Val	Leu	Leu	Lys	His	Leu	Asp	Asn	Glu	Leu	Ser	Glu
			20					25					30		
Leu	Phe	Thr	Glu	Ile	Ala	Arg	Glu	Lys	Trp	Asp	Val	Arg	Leu	Gly	Gln
			35					40					45		
Gly	Thr	Thr	Ala	Ile	Asp	Gln	Val	Glu	Lys	Gln	Arg	Glu	Asp	Gly	Ser
			50					55					60		
Ser	Tyr	Phe	Glu	Thr	Thr	Ile	Thr	Phe	Glu	Asp	Gly	Ser	Thr	Val	Thr
65						70				75				80	
Gly	Asp	Ala	Phe	Leu	Val	Ala	Thr	Gly	Arg	Thr	Pro	Asn	Thr	Asp	Arg
				85					90					95	
Leu	Gly	Leu	Asp	Asn	Gly	Ser	Gly	Val	Lys	Val	Glu	Arg	Gly	Arg	
				100					105					110	

<210> 2573

<211> 460

<212> DNA

<213> Homo sapiens

<400> 2573

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gccggatcca taccggaccg tttcgtcagg gtggctcgac atcgacgaca ccgcagatgc
120
cgagacgacg ttgatacgtc caccggcgcg gtccgtgatc caccgcgtcg tcgccgttgc
180
cgccactggc acgatgaggg ccatacccca gaagagaacg gccaccactc gcagaccacc
240
tcgtcccaga agagcgagga cgaaggcgat gacggcgatg accagagccg gtacagccaa
300
cgatcccacc agaacggagg agatgaagggt gagggcattg tgtgagggga ggatcgcggc
360

cactgaccac gccagtaccg gcagggtcag gatcagcccg acgagaccgg aagtgatgcg
 420
 tagccaggaa tgacgggagg ttttcgtgtc agccacgcgt
 460

<210> 2574
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2574
 Met Gly Thr Val Asp Leu Gly Arg Leu Val Arg Ala Gly Ser Ile Pro
 1 5 10 15
 Asp Arg Phe Val Arg Val Val Gly His Arg Arg His Arg Arg Cys Arg
 20 25 30
 Asp Asp Val Asp Thr Ser Thr Gly Ala Val Arg Asp Pro Arg Arg Arg
 35 40 45
 Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn
 50 55 60
 Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly
 65 70 75 80
 Asp Asp Gly Asp Asp Gln Ser Arg Tyr Ser Gln Arg Ser His Gln Asn
 85 90 95
 Gly Gly Asp Glu Gly Glu Gly Ile Val
 100 105

<210> 2575
 <211> 3954
 <212> DNA
 <213> Homo sapiens

<400> 2575
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 ccactctcgc gcctccgaac agccacaggg gcaaagccct gtcacccccca ggatccgggtc
 120
 atcagggaaa gaggacaggg agaccagaag agggccagct gggacgaggg ggcggacgcc
 180
 caggaggcaa cttctgagac gcagctcctg agaggggcag ggaccaggcg cgggaggcca
 240
 gagggggcac agagaacaaa cccctcaga agtgaagagg agagcggaag gaaccgagag
 300
 gggacggaca ggagctgagg aggaaagagg aggggagagg ggtcaggcca ggcagccaag
 360
 gagaagacgt gtggccgggg gctatcagaa ggaaactggg acggacgggc cgggctcggg
 420
 ctgtcctgtg gagcagcagc atccccgggg ccggcagagg cgccagtggc tgggcgggat
 480
 gagtctctga gggccactgt ggagcgcccc gccatggccc cccgcacct ctggagctgc
 540
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 660

ccccggccag ccagccgcca caggaactgg tgtgcctacg tggtgacccg gacagtgagc
720
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780
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840
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900
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960
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1020
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1080
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1140
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2280

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3780
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tccactggcc ctccaggtcg attccctggg ctccaggctc ccccgcgcg gcgcccga
3900

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3954

<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

Met	Ala	Pro	Arg	Thr	Leu	Trp	Ser	Cys	Tyr	Leu	Cys	Cys	Leu	Leu	Thr
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Ala	Ala	Ala	Gly	Ala	Ala	Ser	Tyr	Pro	Pro	Arg	Gly	Phe	Ser	Leu	Tyr
		20						25					30		
Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
		35					40					45			
Ala	Pro	Arg	Pro	Ala	Ser	Arg	His	Arg	Asn	Trp	Cys	Ala	Tyr	Val	Val
	50					55					60				
Thr	Arg	Thr	Val	Ser	Cys	Val	Leu	Glu	Asp	Gly	Val	Glu	Thr	Tyr	Val
65					70					75				80	
Lys	Tyr	Gln	Pro	Cys	Ala	Trp	Gly	Gln	Pro	Gln	Cys	Pro	Gln	Ser	Ile
			85					90						95	
Met	Tyr	Arg	Arg	Phe	Leu	Arg	Pro	Arg	Tyr	Arg	Val	Ala	Tyr	Lys	Thr
			100					105						110	
Val	Thr	Asp	Met	Glu	Trp	Arg	Cys	Cys	Gln	Gly	Tyr	Gly	Gly	Asp	Asp
		115					120					125			
Cys	Ala	Glu	Ser	Pro	Ala	Pro	Ala	Leu	Gly	Pro	Ala	Ser	Ser	Thr	Pro
	130					135					140				
Arg	Pro	Leu	Ala	Arg	Pro	Ala	Arg	Pro	Asn	Leu	Ser	Gly	Ser	Ser	Ala
145					150					155					160
Gly	Ser	Pro	Leu	Ser	Gly	Leu	Gly	Gly	Glu	Gly	Pro	Gly	Glu	Ser	Glu
			165					170						175	
Lys	Val	Gln	Gln	Leu	Glu	Glu	Gln	Val	Gln	Ser	Leu	Thr	Lys	Glu	Leu
			180					185						190	
Gln	Gly	Leu	Arg	Gly	Val	Leu	Gln	Gly	Leu	Ser	Gly	Arg	Leu	Ala	Glu
		195					200					205			
Asp	Val	Gln	Arg	Ala	Val	Glu	Thr	Ala	Phe	Asn	Gly	Arg	Gln	Gln	Pro
	210					215					220				
Ala	Asp	Ala	Ala	Ala	Arg	Pro	Gly	Val	His	Glu	Thr	Leu	Asn	Glu	Ile
225					230					235					240
Gln	His	Gln	Leu	Gln	Leu	Leu	Asp	Thr	Arg	Val	Ser	Thr	His	Asp	Gln
			245					250						255	
Glu	Leu	Gly	His	Leu	Asn	Asn	His	His	Gly	Gly	Ser	Ser	Ser	Ser	Gly
			260					265						270	
Gly	Ser	Arg	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Pro	Gly	Pro	Ser	Glu
		275					280					285			
Glu	Leu	Leu	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Glu	Ser	Cys	Ser	Val
	290					295					300				
Cys	Leu	Ala	Gly	Leu	Asp	Gly	Phe	Arg	Arg	Gln	Gln	Gln	Glu	Asp	Arg
305					310					315					320
Glu	Arg	Leu	Arg	Ala	Met	Glu	Lys	Leu	Leu	Ala	Ser	Val	Glu	Glu	Arg
			325					330						335	
Gln	Arg	His	Leu	Ala	Gly	Leu	Ala	Val	Gly	Arg	Arg	Pro	Pro	Gln	Glu
			340					345						350	
Cys	Cys	Ser	Pro	Glu	Leu	Gly	Arg	Arg	Leu	Ala	Glu	Leu	Glu	Arg	Arg

355	360	365
Leu Asp Val Val Ala Gly Ser Val Thr Val Leu Ser Gly Arg Arg Gly		
370	375	380
Thr Glu Leu Gly Gly Ala Ala Gly Gln Gly Gly His Pro Pro Gly Tyr		
385	390	395
Thr Ser Leu Ala Ser Arg Leu Ser Arg Leu Glu Asp Arg Phe Asn Ser		
405	410	415
Thr Leu Gly Pro Ser Glu Glu Gln Glu Glu Ser Trp Pro Gly Ala Pro		
420	425	430
Gly Gly Leu Ser His Trp Leu Pro Ala Ala Arg Gly Arg Leu Glu Gln		
435	440	445
Leu Gly Gly Leu Leu Ala Asn Val Ser Gly Glu Leu Gly Gly Arg Leu		
450	455	460
Asp Leu Leu Glu Glu Gln Val Ala Gly Ala Met Gln Ala Cys Gly Gln		
465	470	475
Leu Cys Ser Gly Ala Pro Gly Glu Gln Asp Ser Gln Val Ser Glu Ile		
485	490	495
Leu Ser Ala Leu Glu Arg Arg Val Leu Asp Ser Glu Gly Gln Leu Arg		
500	505	510
Leu Val Gly Ser Gly Leu His Thr Val Glu Ala Ala Gly Glu Ala Arg		
515	520	525
Gln Ala Thr Leu Glu Gly Leu Gln Glu Val Val Gly Arg Leu Gln Asp		
530	535	540
Arg Val Asp Ala Gln Asp Glu Thr Ala Ala Glu Phe Thr Leu Arg Leu		
545	550	555
Asn Leu Thr Ala Ala Arg Leu Gly Gln Leu Glu Gly Leu Leu Gln Ala		
565	570	575
His Gly Asp Glu Gly Cys Gly Ala Cys Gly Gly Val Gln Glu Glu Leu		
580	585	590
Gly Arg Leu Arg Asp Gly Val Glu Arg Cys Ser Cys Pro Leu Leu Pro		
595	600	605
Pro Arg Gly Pro Gly Ala Gly Pro Gly Val Gly Gly Pro Ser Arg Gly		
610	615	620
Pro Leu Asp Gly Phe Ser Val Phe Gly Gly Ser Ser Gly Ser Ala Leu		
625	630	635
Gln Ala Leu Gln Gly Glu Leu Ser Glu Val Ile Leu Ser Phe Ser Ser		
645	650	655
Leu Asn Asp Ser Leu Asn Glu Leu Gln Thr Thr Val Glu Gly Gln Gly		
660	665	670
Ala Asp Leu Ala Asp Leu Gly Ala Thr Lys Asp Arg Ile Ile Ser Glu		
675	680	685
Ile Asn Arg Leu Gln Gln Glu Ala Thr Glu His Ala Thr Glu Ser Glu		
690	695	700
Glu Arg Phe Arg Gly Leu Glu Glu Gly Gln Ala Gln Ala Gly Gln Cys		
705	710	715
Pro Ser Leu Glu Gly Arg Leu Gly Arg Leu Glu Gly Val Cys Glu Arg		
725	730	735
Leu Asp Thr Val Ala Gly Gly Leu Gln Gly Leu Arg Glu Gly Leu Ser		
740	745	750
Arg His Val Ala Gly Leu Trp Ala Gly Leu Arg Glu Thr Asn Thr Thr		
755	760	765
Ser Gln Met Gln Ala Ala Leu Leu Glu Lys Leu Val Gly Gly Gln Ala		
770	775	780
Gly Leu Gly Arg Arg Leu Gly Ala Leu Asn Ser Ser Leu Gln Leu Leu		

785 790 795 800
 Glu Asp Arg Leu His Gln Leu Ser Leu Lys Asp Leu Thr Gly Pro Ala
 805 810 815
 Gly Glu Ala Gly Pro Pro Gly Pro Pro Gly Leu Gln Gly Pro Pro Gly
 820 825 830
 Pro Ala Gly Pro Pro Gly Ser Pro Gly Lys Asp Gly Gln Glu Gly Pro
 835 840 845
 Ile Gly Pro Pro Gly Pro Gln Gly Glu Gln Gly Val Glu Gly Ala Pro
 850 855 860
 Ala Ala Pro Val Pro Gln Val Ala Phe Ser Ala Ala Leu Ser Leu Pro
 865 870 875 880
 Arg Ser Glu Pro Gly Thr Val Pro Phe Asp Arg Val Leu Leu Asn Asp
 885 890 895
 Gly Gly Tyr Tyr Asp Pro Glu Thr Gly Val Phe Thr Ala Pro Leu Ala
 900 905 910
 Gly Arg Tyr Leu Leu Ser Ala Val Leu Thr Gly His Arg His Glu Lys
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           35             40             45
Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro
 50             55             60
Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln
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           20             25             30
Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala
           35             40             45
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro
 50             55             60
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly
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Asp	Lys	Glu	Asp	Gln	Glu	Pro	Ile	Arg	Cys	Pro	Val	Pro	Gly	Cys Asp
945				950					955					960
Gly	Gln	Gly	His	Ile	Thr	Gly	Lys	Tyr	Ala	Ser	His	Arg	Ser	Ala Ser
				965					970					975
Gly	Cys	Pro	Leu	Ala	Ala	Lys	Arg	Gln	Lys	Asp	Gly	Tyr	Leu	Asn Gly

980 985 990
 Ser Gln Phe Ser Trp Lys Ser Val Lys Thr Glu Gly Met Ser Cys Pro
 995 1000 1005
 Thr Pro Gly Cys Asp Gly Ser Gly His Val Ser Gly Ser Phe Leu Thr
 1010 1015 1020
 His Arg Ser Leu Ser Gly Cys Pro Arg Ala Thr Ser Ala Met Lys Lys
 1025 1030 1035 1040
 Ala Lys Leu Ser Gly Glu Gln Met Leu Thr Ile Lys Gln Arg Ala Ser
 1045 1050 1055
 Asn Gly Ile Glu Asn Asp Glu Glu Ile Lys Gln Leu Asp Glu Glu Ile
 1060 1065 1070
 Lys Glu Leu Asn Glu Ser Asn Ser Gln Met Glu Ala Asp Met Ile Lys
 1075 1080 1085
 Leu Arg Thr Gln Ile Thr Thr Met Glu Ser Asn Leu Lys Thr Ile Glu
 1090 1095 1100
 Glu Glu Asn Lys Val Ile Glu Gln Gln Asn Glu Ser Leu Leu His Glu
 1105 1110 1115 1120
 Leu Ala Asn Leu Ser Gln Ser Leu Ile His Ser Leu Ala Asn Ile Gln
 1125 1130 1135
 Leu Pro His Met Asp Pro Ile Asn Glu Gln Asn Phe Asp Ala Tyr Val
 1140 1145 1150
 Thr Thr Leu Thr Glu Met Tyr Thr Asn Gln Asp Arg Tyr Gln Ser Pro
 1155 1160 1165
 Glu Asn Lys Ala Leu Leu Glu Asn Ile Lys Gln Ala Val Arg Gly Ile
 1170 1175 1180
 Gln Val
 1185

<210> 2585

<211> 542

<212> DNA

<213> Homo sapiens

<400> 2585

cactcactcc tccacagaat ttggcctcag ccagcccccac gctcagcatg cccagccctg
 60
 ccaagagccc agggatcgcc tcgctgacag accccaaaac acggggccacg ccaccccgtc
 120
 ctctaggtac ctgtgcccc agtctcaagc atcactccgt gtctccctca catgccttct
 180
 gggcctctag cctcacaaga gctaaagtat gtgagcactt tctcagccct ttaaaccgat
 240
 taagtcatgt cactctcaca aggctgctgt gttttattac ctctgtttca ggtgcaagtc
 300
 atccccggga ggagtggtgg ggatgccgcc tgacctggg ccacctggct gcagcatctg
 360
 tgttgatgac caccctcctg cctcaggctt tgctcctgaa tgttcttgct ctctaggtct
 420
 gtccgctcct ggccctgctc ttcttaactc cgttcaagcc cctggggtca cactgccatg
 480
 ctcatcatt caatgacgcg gatgctggcg atccccaaat ctctaatcc aagtgcagat
 540
 ct
 542

<210> 2586
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 2586
 Met Pro Ser Pro Ala Lys Ser Pro Gly Ile Ala Ser Leu Thr Asp Pro
 1 5 10 15
 Lys Thr Arg Ala Thr Pro Pro Arg Pro Leu Gly Thr Cys Ala Pro Ser
 20 25 30
 Leu Lys His His Ser Val Ser Pro Ser His Ala Phe Trp Ala Ser Ser
 35 40 45
 Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly
 50 55 60
 Leu Ser His Val Ile Leu Thr Arg Leu Leu Cys Phe Ile Thr Ser Val
 65 70 75 80
 Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr
 85 90 95
 Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro
 100 105 110
 Gln Ala Leu Leu Leu Asn Val Leu Ala Leu
 115 120

<210> 2587
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2587
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 gccagggcg ctggagaccg catggatgag gtcataagg aggtgccgcg cgttcgtaag
 120
 gatgccggt acccgccgct ggtaaccccg tcgtcccaga tcgtgggaac ccaggcgggtg
 180
 ttcaacgtct tgatgggcaa tggttcgtac aagaatctca ctgccgagtt tgccgacctc
 240
 atgctcggct actacggcaa gccattggc gagctcaatc ctgagatcgt cgagatggcc
 300
 aagaagcaga ccggcaagga gccgatcgac tgccgtcccg ccgacttgct cgagcctgag
 360
 tgggatcagt tggtcgagca ggccaagagt cttgagggct tcgacggctc cgacgaggac
 420
 gttcttacca acgcg
 435

<210> 2588
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2588
 Xaa Asn Ile His Ala Ala Ile Pro Gly Gly Met Leu Ser Asn Met Glu

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      1           5           10           15
Ser Gln Leu Glu Ala Gln Gly Ala Gly Asp Arg Met Asp Glu Val Met
      20           25           30
Lys Glu Val Pro Arg Val Arg Lys Asp Ala Gly Tyr Pro Pro Leu Val
      35           40           45
Thr Pro Ser Ser Gln Ile Val Gly Thr Gln Ala Val Phe Asn Val Leu
      50           55           60
Met Gly Asn Gly Ser Tyr Lys Asn Leu Thr Ala Glu Phe Ala Asp Leu
      65           70           75           80
Met Leu Gly Tyr Tyr Gly Lys Pro Ile Gly Glu Leu Asn Pro Glu Ile
      85           90           95
Val Glu Met Ala Lys Lys Gln Thr Gly Lys Glu Pro Ile Asp Cys Arg
      100          105          110
Pro Ala Asp Leu Leu Glu Pro Glu Trp Asp Gln Leu Val Glu Gln Ala
      115          120          125
Lys Ser Leu Glu Gly Phe Asp Gly Ser Asp Glu Asp Val Leu Thr Asn
      130          135          140
Ala
145

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<210> 2589

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2589

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ccggcgaaga aggacatggc catggtcttc ggcgcgactc attacgtcga cccgacggcc
60
ggcgatccgg ttgagcagat cagagcgctg accagggggc gcggcgctcga tttcgcgatc
120
gaggtcgtcg gcatcgctga ggtcatggag caggcctact gggcggcgcg acgcggcgcg
180
acgategtgt acgtcggggc gctgggcacg gacgccaagc tggctctgcc ggcgaacgac
240
ctgcacggcg gcgccaagac gatcatcggc tgcgccaacg gattggggcg agtgcgcacc
300
gactatgcca agatgatctc gctggctcag accggacggc tggacctggg cgggatgatc
360
acgcgt
366

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<210> 2590

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2590

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Pro Ala Lys Lys Asp Met Ala Met Val Phe Gly Ala Thr His Tyr Val
      1           5           10           15
Asp Pro Thr Ala Gly Asp Pro Val Glu Gln Ile Arg Ala Leu Thr Arg
      20           25           30
Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val
      35           40           45
Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr

```

```

      50              55              60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
65              70              75              80
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
      85              90              95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
      100              105              110
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
      115              120

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<210> 2591

<211> 341

<212> DNA

<213> Homo sapiens

<400> 2591

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acgcgtaaag gcacgacctc accttatcat cagggtcaca cgtgtgttat tctggggctg
60
agcagccac gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct
120
tctgtctcca gggcaggccc tgggcagggc aatgctgggg acacggtggg gagtaggcca
180
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa
240
ggggtgaccc tgcactcgag gctcctggga agacggggag gggttgaggtt acatgaggga
300
gaggggtcag ttggtgcatt cacagaacag cagggtggcc a
341

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<210> 2592

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2592

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Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu
1              5              10              15
Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met
      20              25              30
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
      35              40              45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
      50              55              60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
65              70              75              80
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
      85              90              95
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
      100              105

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<210> 2593

<211> 501

<212> DNA

<213> Homo sapiens

<400> 2593

cgcgtaaggc caccagaaga tttttatgca cagattccgt tgcttcgaga gctaatttcg
 60
 gcgctttcat ggggttttat ggaggtggat gaatatgagg cggatgatat tatcgggtacc
 120
 ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc
 180
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg
 240
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa
 300
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg
 360
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggatttat
 420
 aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca
 480
 gctgagatgt ctcttaagct t
 501

<210> 2594

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2594

Arg	Val	Arg	Pro	Pro	Glu	Asp	Phe	Tyr	Ala	Gln	Ile	Pro	Leu	Leu	Arg
1			5					10					15		
Glu	Leu	Ile	Ser	Ala	Leu	Ser	Trp	Gly	Phe	Met	Glu	Val	Asp	Glu	Tyr
			20					25					30		
Glu	Ala	Asp	Asp	Ile	Ile	Gly	Thr	Leu	Ala	Arg	Gln	Ala	Asp	Glu	Ala
		35					40					45			
Gly	Asp	Tyr	Met	Thr	Tyr	Ile	Val	Ser	Ser	Asp	Leu	Asp	Met	Leu	Gln
	50					55					60				
Ile	Val	Asp	Glu	Asn	Thr	Lys	Met	Tyr	Arg	Ile	Leu	Arg	Gly	Phe	Ser
65					70				75					80	
Asp	Leu	Glu	Glu	Met	Asp	Thr	Pro	Ala	Ile	Glu	Glu	Lys	Tyr	Gly	Ile
			85						90					95	
Leu	Lys	Ser	Gln	Phe	Leu	Asp	Leu	Lys	Ala	Leu	Lys	Gly	Asp	Asn	Ser
			100					105					110		
Asp	Asn	Ile	Pro	Gly	Val	Pro	Gly	Ile	Gly	Glu	Lys	Thr	Ala	Val	Lys
		115					120					125			
Leu	Leu	Asn	Glu	Tyr	Gly	Ser	Leu	Glu	Gly	Ile	Tyr	Asn	His	Ile	Lys
	130					135					140				
Glu	Ile	Ser	Gly	Ala	Thr	Gln	Lys	Lys	Leu	Ile	Ala	Gly	Arg	Glu	Ser
145					150					155				160	
Ala	Glu	Met	Ser	Leu	Lys	Leu									
						165									

<210> 2595

<211> 928

<212> DNA

<213> Homo sapiens

<400> 2595

agatcttcca gatgcaacaa tgatcaatta agacacgagg cgacatgggtg gccctgcct
 60
 cccccccag ggatacctgt aatacctgct tccacttca tgggctacaa tctcatgctg
 120
 gtcacaattt ctgggggtca ctcatataac accaacaat gggatatttg tgaagaactt
 180
 cgcctgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg
 240
 tgggtggcgg actgcactgc caactggaga gaaaaatgga gtaaagtctg agctgaaagg
 300
 aacagtgccg gaaaggaagg aagacaactc agaataaac tagagatggc gatgaaagaa
 360
 tcggatccac tgaaacagaa acagagtttg ccacttcaga aggaggcatt agaagctaat
 420
 gttaccagg atctgaagct tctggcttc gtagaagaat cctgtgaaca tacagaccaa
 480
 tttcaattga gttcacaaat gcatgagtct atcagagagt atttggtaaa aagacaattt
 540
 tctacaaagg aggacacaaa taataaggaa caaggtgtgg ttattgattc tctaaaatta
 600
 agtgaggaga tgaagccaa tctagatggt gttgatttat tcaacaatgg tggttctgga
 660
 aacggtgaaa cgaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa
 720
 gtaactgaaa ttccagcttt gcaggtgcat ttggatgaat tccaaaaaat cttatggagg
 780
 gaaagagaaa tgcgcacagc ttggaaaaaa gaaatagaga gactggagtc ggctttgtct
 840
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt
 900
 gacattcttc ttggtcaaca taatgatg
 928

<210> 2596

<211> 309

<212> PRT

<213> Homo sapiens

<400> 2596

Arg	Ser	Ser	Arg	Cys	Asn	Asn	Asp	Gln	Leu	Arg	His	Ala	Ala	Thr	Trp
1				5				10						15	
Trp	Pro	Leu	Pro	His	Pro	Pro	Gly	Ile	Pro	Val	Ile	Pro	Ala	Ser	His
			20					25					30		
Phe	Met	Gly	Tyr	Asn	Leu	Met	Leu	Val	Thr	Ile	Ser	Gly	Ala	His	Ser
		35					40					45			
Tyr	Asn	Thr	Asn	Lys	Trp	Asp	Ile	Cys	Glu	Glu	Leu	Arg	Leu	Arg	Glu
	50				55					60					
Leu	Glu	Glu	Val	Lys	Ala	Arg	Ala	Ala	Gln	Met	Glu	Lys	Thr	Met	Arg
65				70					75					80	
Trp	Trp	Ser	Asp	Cys	Thr	Ala	Asn	Trp	Arg	Glu	Lys	Trp	Ser	Lys	Val
				85				90					95		
Arg	Ala	Glu	Arg	Asn	Ser	Ala	Gly	Lys	Glu	Gly	Arg	Gln	Leu	Arg	Ile

100 105 110
 Lys Leu Glu Met Ala Met Lys Glu Ser Asp Pro Leu Lys Gln Lys Gln
 115 120 125
 Ser Leu Pro Leu Gln Lys Glu Ala Leu Glu Ala Asn Val Thr Gln Asp
 130 135 140
 Leu Lys Leu Pro Gly Phe Val Glu Glu Ser Cys Glu His Thr Asp Gln
 145 150 155 160
 Phe Gln Leu Ser Ser Gln Met His Glu Ser Ile Arg Glu Tyr Leu Val
 165 170 175
 Lys Arg Gln Phe Ser Thr Lys Glu Asp Thr Asn Asn Lys Glu Gln Gly
 180 185 190
 Val Val Ile Asp Ser Leu Lys Leu Ser Glu Glu Met Lys Pro Asn Leu
 195 200 205
 Asp Gly Val Asp Leu Phe Asn Asn Gly Gly Ser Gly Asn Gly Glu Thr
 210 215 220
 Lys Thr Gly Leu Arg Leu Lys Ala Ile Asn Leu Pro Leu Glu Asn Glu
 225 230 235 240
 Val Thr Glu Ile Ser Ala Leu Gln Val His Leu Asp Glu Phe Gln Lys
 245 250 255
 Ile Leu Trp Lys Glu Arg Glu Met Arg Thr Ala Leu Glu Lys Glu Ile
 260 265 270
 Glu Arg Leu Glu Ser Ala Leu Ser Leu Trp Lys Trp Lys Tyr Glu Glu
 275 280 285
 Leu Lys Glu Ser Lys Pro Lys Asn Val Lys Glu Phe Asp Ile Leu Leu
 290 295 300
 Gly Gln His Asn Asp
 305

<210> 2597

<211> 631

<212> DNA

<213> Homo sapiens

<400> 2597

ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
 60
 ggctgcacct gcagctgagg gtttagcagga attaggagat aacagtagaa tagggctaga
 120
 ctgaaaaggc ctttgatgcc aggttaggaa atttacattt tatccacaaa atccaaatcc
 180
 tcctttaata atgagatgtc tttaacaagtt tttgggcaag agtgggtatgg ctgacctggg
 240
 gtccctgggaa ggaactgtgt ggggatgggtg tgcaggactt acctagggtg ggaaaggcac
 300
 aagcagcatg gggctgtggc agctaccaga ggtaaaggga catttcaggg aaagacttgg
 360
 caggacaaga ccttccttgg atggatggat gaataccaga aacagggacc caagagaaaag
 420
 gccgagtttc atagggagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
 480
 ggtgagacgt ccagtcgaca gtactacca ctggccagtg agaaatgtgg gaccaggggt
 540
 caggaggaaa ctggggccgg aaatgagcat ttggaaggcg ccaggggtgga agcgggtggt
 600

tcactccacg agtgctatct cacttacgcg t
631

<210> 2598

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2598

Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg
1 5 10 15
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn
20 25 30
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser
35 40 45
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp
50 55 60
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg
65 70 75 80
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg
85 90 95
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg
100 105

<210> 2599

<211> 356

<212> DNA

<213> Homo sapiens

<400> 2599

nagatcttat acagggacgt gatgttggag aactactgga accttggttc tctgggactg
60
tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg
120
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc
180
acagatatcc ctctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca
240
gaagcagtat tccacacagt ggtgttgga agacacgaaa gccctgacat tgaagacttt
300
tccttcaagg aaccccagaa aaatgtgcat gattttgagt gtcaatggag agatgn
356

<210> 2600

<211> 118

<212> PRT

<213> Homo sapiens

<400> 2600

Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val
1 5 10 15
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu
20 25 30
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg

```

      35              40              45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
  50              55              60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
  65              70              75              80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
      85              90              95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
      100              105              110
Glu Cys Gln Trp Arg Asp
      115

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<210> 2601
 <211> 329
 <212> DNA
 <213> Homo sapiens

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<400> 2601
gcgcgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgccc
  60
tacttgatca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cgggtggtggg
  120
gtcaccgcct tcggcttgcg ccacaacccc aaggacactg cgcgcatgcy ccgcgaaggg
  180
ttgatcgccct tgcccgaaga cctcggtatc cgccgcaccg acgccaccgg cgaactgttg
  240
gccgccaaga gcgtggccga cctggtggag tgggtccggtg gcttgtgcaa cccgcccggc
  300
aagttcagga gctggtaaat gcgcgccct
  329

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<210> 2602
 <211> 105
 <212> PRT
 <213> Homo sapiens

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<400> 2602
Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
  1              5              10              15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
      20              25              30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
      35              40              45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
      50              55              60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
      65              70              75              80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
      85              90              95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
      100              105

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<210> 2603
 <211> 423

<212> DNA

<213> Homo sapiens

<400> 2603

tcatgatcca ttgctctacc ctttacgggt gtgcacctac gccagggtcg gtggtcagga
 60
 gcatcggttc ggtggtaccg aggtcgagga cttccttcac gccgttggtc gcggagggca
 120
 gggtgtggta agtggtcagg tgggccacga tctgggcact gatcacctcg gtgaaatcga
 180
 agctctgggt accctgagcg gtcgccgaca cgacacggtc cacaccggag accagaccga
 240
 tctcgagat gatcgcgtaa ccttcattgt cgtagaggat cttgcacgca tcgatgatgc
 300
 gcttgatctc cttggcagtg aagatgattt ccatcggggt gttggccgac agatactgac
 360
 cggagctggt ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttggtccg
 420
 cgg
 423

<210> 2604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2604

Met	Glu	Ile	Ile	Phe	Thr	Ala	Lys	Glu	Ile	Lys	Arg	Ile	Ile	Asp	Ala
1				5					10					15	
Cys	Lys	Ile	Leu	Tyr	Asp	Asn	Glu	Gly	Tyr	Ala	Ile	Ile	Ser	Glu	Ile
			20					25					30		
Gly	Leu	Val	Ser	Gly	Val	Asp	Arg	Val	Val	Ser	Ala	Thr	Ala	Gln	Gly
		35					40					45			
Asn	Gln	Ser	Phe	Asp	Phe	Thr	Glu	Val	Ile	Ser	Ala	Gln	Ile	Val	Ala
		50					55					60			
His	Leu	Thr	Thr	Tyr	His	Asn	Leu	Pro	Ser	Ala	Asn	Asn	Gly	Val	Lys
65					70					75				80	
Glu	Val	Leu	Asp	Leu	Gly	Thr	Thr	Glu	Pro	Met	Leu	Leu	Thr	Thr	Asp
			85						90					95	
Leu	Gly	Val	Gly	Ala	Gln	Pro									
			100												

<210> 2605

<211> 354

<212> DNA

<213> Homo sapiens

<400> 2605

ngggaggagg ggcattgcaa aagcgactgt atccagaggg ttgatttaa acatttttca
 60
 aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccactttctc
 120
 tttgcatgct gggacctgtt ccactttcaa aatgtgtcat tttggaagga aaggaggagaa
 180

caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aaggttgccc
 240
 caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcacaaat
 300
 ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gagc
 354

<210> 2606
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2606
 Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln
 1 5 10 15
 Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe
 20 25 30
 Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys
 35 40 45
 His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val
 50 55 60
 Ser Met Ser Pro Phe Ser Ser Ala Glu Gly Cys Pro Lys Val Pro Pro
 65 70 75 80
 Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met
 85 90 95
 Gly His Pro Gly Leu
 100

<210> 2607
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 2607
 tgatcaagaa caatgatacg atatcctaac caacagagga agcaacggaa gttgttgttg
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 tttttatgct gttttttttt tttgagaacg gatcttgccc ctgccccag gccggaatgg
 120
 atgacatgga cagaaccccg tcggaaaaaa gccggaatgt gcaaacccaa attcccacca
 180
 cacggggggcc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa
 240
 actttttttt ttttaannn anaccccaa aaaaaccaa aaaaaaatt taaaaaa
 297

<210> 2608
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2608
 Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu
 1 5 10 15
 Phe Leu Cys Cys Phe Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro

			20					25					30				
Arg	Pro	Glu	Trp	Met	Thr	Trp	Thr	Glu	Pro	Arg	Arg	Lys	Lys	Ala	Gly		
		35					40					45					
Met	Cys	Lys	Pro	Lys	Phe	Pro	Pro	His	Gly	Gly	Pro	Asn	Asn	Trp	Ile		
	50					55					60						
His	Pro	Xaa	Lys	Xaa	Pro	Xaa	Gln	Lys	Lys	Xaa	Lys	Thr	Phe	Phe	Phe		
65					70					75					80		
Leu	Xaa	Xaa	Xaa	Pro	Gln	Lys	Asn	Gln	Lys	Lys	Lys	Phe	Lys	Lys			
				85					90					95			

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<210> 2609
<211> 305
<212> DNA
<213> Homo sapiens
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<400> 2609
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ttgacacgtc cctgacgata cctatccgct catctggaga cccatgcggt ccttggaccc
120
caattgccta cgaaaaaatt ttttttttcc cccccaaaaa acaccccccc ctgcgcatctg
180
tgaaagttct acctcggggt cgtcatctcg gctgtcatcg tcggcaaatc actcagctgg
240
cgtaccctt cgtcatcgcc cgggccaccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305
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<210> 2610
<211> 98
<212> PRT
<213> Homo sapiens
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<400> 2610
Met Met Ser Gly Lys Asp Asp Pro Gly Met Ala Lys Val Tyr Gly Phe
  1              5              10              15
Val Asp Thr Ser Leu Thr Ile Pro Ile Arg Ser Ser Gly Asp Pro Cys
      20              25              30
Val Pro Trp Thr Pro Ile Ala Tyr Glu Lys Ile Phe Phe Phe Pro Pro
      35              40              45
Lys Lys His Pro Pro Leu Ala Ser Val Lys Val Leu Pro Arg Gly Arg
      50              55              60
His Leu Gly Cys His Arg Arg Gln Ile Thr Gln Leu Ala Val Pro Phe
65              70              75              80
Val Ile Ala Arg Ala Thr Asp Leu Asp Gly Xaa Ala Cys Thr Ala Thr
      85              90              95
Thr Thr

```

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<210> 2611
<211> 342
<212> DNA
<213> Homo sapiens
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<400> 2611

gcccgcgcga tcgacggcga ctccctcgacc agctgggtgt ccagctcgct gcaaaccgct
60
gtggggcaat ggcttcaggt ggacttcgac catccgggtga ccaacgcgac catcaccctg
120
acgcccagcg ccaccgctgt cggagctcag gtgcgccggt tcgaggtggc aacagccaac
180
ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgccttac
240
ggcgagacct catgggtccg gttcaccgcg accggcaccg acgacggctc ccccggcggtg
300
cagttcgga tcaccgactt ctccgtgacg cagtacgacg cg
342

<210> 2612

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2612

Ala	Ala	Ala	Ile	Asp	Gly	Asp	Ser	Ser	Thr	Ser	Trp	Val	Ser	Ser	Ser
1			5						10				15		
Leu	Gln	Thr	Ala	Val	Gly	Gln	Trp	Leu	Gln	Val	Asp	Phe	Asp	His	Pro
		20					25					30			
Val	Thr	Asn	Ala	Thr	Ile	Thr	Leu	Thr	Pro	Ser	Ala	Thr	Ala	Val	Gly
	35					40					45				
Ala	Gln	Val	Arg	Arg	Val	Glu	Val	Ala	Thr	Ala	Asn	Gly	Thr	Ser	Thr
50					55				60						
Ile	Arg	Phe	Asp	Gln	Pro	Gly	Lys	Pro	Leu	Thr	Ala	Ala	Leu	Pro	Tyr
65				70				75					80		
Gly	Glu	Thr	Ser	Trp	Val	Arg	Phe	Thr	Ala	Thr	Gly	Thr	Asp	Asp	Gly
		85				90					95				
Ser	Pro	Gly	Val	Gln	Phe	Gly	Ile	Thr	Asp	Phe	Ser	Val	Thr	Gln	Tyr
		100				105						110			

Asp Ala

<210> 2613

<211> 414

<212> DNA

<213> Homo sapiens

<400> 2613

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60
ttctcctcct ccaaaagggt aggggtctgac ctaatgggtac tttgtctgat gttttccaga
120
tatgccccta ctgggaaggg ccaagtgggc aggcagagtc tgggggtggag cgaggtgggg
180
ctgggaagca ctctgctttt tctgctgccc cagaacgaat gcaagttctg gcagcttctc
240
ctcctcctgg gaggaggaaa ggagggtctg cctccaggtc tcaggctgag ggagtgggct
300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact
 360
 ctggggcccc tcccaggctc tctcgtggc aggcaggac ttggggccagc atgg
 414

<210> 2614

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2614

Met	Val	Leu	Cys	Leu	Met	Phe	Ser	Arg	Tyr	Ala	Pro	Thr	Gly	Lys	Gly
1				5					10					15	
Gln	Val	Gly	Arg	Gln	Ser	Leu	Gly	Trp	Ser	Glu	Val	Gly	Leu	Gly	Ser
			20					25					30		
Thr	Pro	Ala	Phe	Leu	Leu	Pro	Gln	Asn	Glu	Cys	Lys	Phe	Trp	Gln	Leu
		35					40					45			
Leu	Leu	Leu	Leu	Gly	Gly	Gly	Lys	Glu	Gly	Ser	Pro	Pro	Gly	Leu	Arg
	50				55					60					
Leu	Arg	Glu	Trp	Ala	Gly	Asp	Pro	Leu	Asp	Gly	Gln	Gln	Arg	Leu	Ala
65				70						75				80	
Ser	Val	Arg	Arg	Leu	Pro	Cys	Val	Thr	Leu	Gly	Pro	Leu	Pro	Gly	Ser
			85					90						95	
Pro	Arg	Gly	Arg	Gln	Gly	Leu	Gly	Pro	Ala	Trp					
		100					105								

<210> 2615

<211> 394

<212> DNA

<213> Homo sapiens

<400> 2615

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 60
 gacgtcgacg ccattgctgaa ggaaacgctg gccagttcg gccacatcga tatectcgtc
 120
 aacaatgcgg gcgtcacgca tgcggccgat ttctcgcacg tgtgcgaaga cgatttcgac
 180
 cgggtcatgc gcattaacct gaaatcgatg ttctgtgctg gccaggccgc ggcgcgcgag
 240
 atggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc
 300
 attccgaacc aggtgccgta cgtggtgtcg aaaggcgcca tcaaccagct gaccaaggtc
 360
 atggccttga acctggcgcc gcacgggtgcg cgct
 394

<210> 2616

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2616

Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val


```

      1           5           10           15
Ser Gln Lys Ala Asp Val Asp Ala Met Leu Lys Glu Thr Leu Ala Gln
      20           25           30
Phe Gly His Ile Asp Ile Leu Val Asn Asn Ala Gly Val Thr His Ala
      35           40           45
Ala Asp Phe Leu Asp Val Cys Glu Asp Asp Phe Asp Arg Val Met Arg
      50           55           60
Ile Asn Leu Lys Ser Met Phe Leu Cys Gly Gln Ala Ala Ala Arg Glu
      65           70           75           80
Met Val Lys Arg Asn Ser Gly Cys Ile Ile Asn Met Ser Ser Val Asn
      85           90           95
Ala Glu Leu Ala Ile Pro Asn Gln Val Pro Tyr Val Val Ser Lys Gly
      100          105          110
Ala Ile Asn Gln Leu Thr Lys Val Met Ala Leu Asn Leu Ala Pro His
      115          120          125
Gly Ala Arg
      130

```

<210> 2617

<211> 513

<212> DNA

<213> Homo sapiens

<400> 2617

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naccggttgg catcatgctc acagcactgg gggttccctt cttcttttc ctctcagaa
60
agacattgtg agatgggaaa tatcatggaa acacctatac tttcgggctc ccacttgaac
120
gtcaccttgg gaaatcacia gattctcaat gacgtctcgg tatcattcca agcgggagtt
180
atgcacgcca tacttgcccc caacggttct gggaagacca ccctggtacg cacgttatgc
240
ggagccctct cccccgagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg
300
tccgcatact gtatcgcgcg tcgtattgcg atcgtctggc agagcgcgac cgctccctct
360
gacctcacgg tacgtcacct cgttggctac gggagatatg cccacacacc gtggtggcag
420
ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg
480
tgcttcgccc atcgacgcgt caccactctc tca
513

```

<210> 2618

<211> 171

<212> PRT

<213> Homo sapiens

<400> 2618

```

Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe
  1           5           10           15
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro
      20           25           30
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile

```

35	40	45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile		
50	55	60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys		
65	70	75
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp		
85	90	95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val		
100	105	110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val		
115	120	125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr		
130	135	140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr		
145	150	155
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser		160
	165	170

<210> 2619

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2619

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nnaaatttcg acgaccttga ggttttcttc aagctgttgc cgcgttcggc anccggggaa
60
cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttccttga taacggtcgt accgacgtgc ttgccgacac ccttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggt ttacgagcgg
240
gcggggcggtc acccttaagg ctcggtgtac cccggggcga ttggtgcggt gctcaatccg
300
cagctgcggg gcgtggagca tcccgctgat cgtggtctgc catacgcg
348

```

<210> 2620

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2620

Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser	
1	15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val	
20	30
Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn	
35	45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg	
50	60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg	
65	80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala	

	85		90		95
Val	Leu	Asn	Pro	Gln	Leu
				Arg	Gly
				Val	Glu
				His	Pro
				Val	Asp
				Arg	Gly
	100		105		110
Leu	Pro	Tyr	Ala		
	115				

<210> 2621

<211> 1485

<212> DNA

<213> Homo sapiens

<400> 2621

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acgcgtgcag gtaaaccaga ggccgtgtga ccagctcagt gctggtttac ggaacaactc
60
ttacttttaa aaattacttg ttcccccaaa ttgttgagtg ccgccgtttg gtttctatg
120
ttttctttcc ctgttttgat tttgctgaag ggagaggtgg tgggtggttag gatcagagct
180
ctcctggcat ccgtggggag gatttgctgg tgggtggcttc gggctcatgc ccagacacac
240
tcactgcccc gtctgtccaa ggctccctc tcccctttgc tgggtgggagg agctcgtgtg
300
ctccttggcc gcttactgga agggcgtttt tcagagctgc agggacaggg tgagcagctg
360
aagggttagg aggggaagccg gcccccgctc tgcagaagct gcatttcagc tgaatctgtg
420
tttcagcttc agttggttgc accgttagcc cctctcctcc cggatggtea tgtttttgtc
480
acattagaga ataaacagcc acacacacat ttttttttcc tttaaaacag taacttgaa
540
atatgaaaag gccagaagga ggagcaaggg ctgttttctg gagtgggtga ggtgtgtgcc
600
tgcagttgtc attgtcttct ccaccgggct gtteccattt atttctctgt gaactgaatc
660
cctctcctcc cactccttg ggagcccagg tggtccttgg ccaccattca ggctttccaa
720
gaagccaacc accttgagga ttttttttct tgaatttcgc tgtttttctc tgcttcttt
780
agataaaaag cagctcaaga gaccttatct tagggatgag aaaaacatgc atattaattc
840
catctgagtg attgtcagt taaggccttt taaaacaaaa gcaagttctt tgttaggaat
900
tgggtcaaat tcatctcttt ctttaagccc atcaactccc aggacggttt gaggtaactc
960
gttacctaag cttgctattc atccaaatca ttttctagag tcaactgtata aggtctatg
1020
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1080
ttctgtacaa ccgtgtgtta tcacagtgc gttttaagt taacngttga acttaggcac
1140
tttctgtgt ggcggaataa gaaaggatnt aacagttaca agcctccaaa ttcagataaa
1200
attaaatcac agttcagatg aaactgaata tcattgtaat aatctcataa tatatatgtg
1260

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taacttgnta gctatctttg aaatcactgn actttgcaat ggtgctaagc tgatagattt
 1320
 aaatacacag acgggagagt ggcgcccggtg tcgatgtctt cagccagtgg tgaccctgct
 1380
 tttgtaaccg cggttaacctg acaaaacctc agcagcagaa gtcctattt ttctaggagt
 1440
 ttatcgtgca gacagtcttc actacaggac tcggccctgg ggccc
 1485

<210> 2622

<211> 83

<212> PRT

<213> Homo sapiens

<400> 2622

Met	Phe	Ser	Phe	Pro	Val	Leu	Ile	Leu	Leu	Lys	Gly	Glu	Val	Val	Val
1				5				10					15		
Val	Arg	Ile	Arg	Ala	Leu	Leu	Ala	Ser	Val	Gly	Arg	Ile	Cys	Trp	Trp
			20					25					30		
Trp	Leu	Arg	Ala	His	Ala	Gln	Thr	His	Ser	Leu	Pro	Arg	Leu	Ser	Lys
		35					40					45			
Ala	Ser	Pro	Ser	Pro	Leu	Leu	Val	Gly	Gly	Ala	Arg	Val	Leu	Leu	Gly
		50				55				60					
Arg	Leu	Leu	Glu	Gly	Arg	Phe	Ser	Glu	Leu	Gln	Gly	Gln	Gly	Glu	Gln
65					70					75				80	
Leu	Lys	Gly													

<210> 2623

<211> 3524

<212> DNA

<213> Homo sapiens

<400> 2623

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 120
 agtgggttcc tgagtggcgg cggaggtacc ggcagtagcg gtggtagcgg ctccggcggc
 180
 ggtggtagtg gcggcgccgg cggcgccggc agcagcggca ggagggcaga gatggaaccc
 240
 acctttcccc agggatatgt tatgttcaac caccgtcttc ccccggtcac cagcttcacc
 300
 cggccggcgg ggtcggcgcg ccttcccccg caatgcgtgt tatectctc tacctccgca
 360
 gccccggcgg ctgagccccc ccttcgccca gccccggaca tgactttcaa gaaggagccg
 420
 gcggcgctcag ccgcggcctt cccctcgcag aggacctcct gggggttctt gcagtctttg
 480
 gttagcatca aacaggagaa acccgcggtat cctgaggagc agcagtcacca ccaccaccat
 540
 caccaccacc actatggggg gctgttcgct ggagctgaag agaggtctcc aggcctagga
 600

ggcgggtgaag gggggagtc cggcgctc caggacctca gtattctcca ccagcatgtc
660
cagcagcaac cagcccagca ccaccgtgac gtattactca gcagcagtag caggactgat
720
gaccaccatg gcactgagga gccaaagcag gacactaatg tcaaaaaggc aaaaaggcca
780
aagccagaat ctccaggaat caaagccaag aggaagccaa gtgcattctt caaaccttct
840
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900
cactgtagtg ctgctttccg aagctcctat cacctgcgga gacatgtcct cattcataca
960
ggagaaagac ctttccagtg cagccagtgt agtatgggtt tcattcagaa atacctacta
1020
cagagacatg agaaaattca tagtagagag aagccatttg gatgtgatca gtgcagcatg
1080
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1140
tataagtgtg acacttgcca acagtatttt tcaaggactg atagattggt gaagcacagg
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1260
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1320
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1380
gaatcgcaaa tttcaaataa tataaacatg cagagttact cagtagaaat gcctaccgtg
1440
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1500
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1560
ccattaccag acatagtagg acagaaatcc ttgtctggaa aaccaagtgg ctccattggc
1620
atagtatcaa ataatagtgt ggagaccatt ggtcttctcc aaagtacaag tggcaaacaa
1680
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1740
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1800
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1860
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1920
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1980
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2040
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2100
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2160
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2220

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 2280
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 2340
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 2400
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 2460
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 2520
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 2580
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 2640
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 2700
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 2760
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 2820
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 2880
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 2940
 ttagcgtgat ttagctctg tttgtattat gatttttaata caaatcaat agattaaaaa
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 3060
 gaatagccca aatgttttaa acgcaaaaaa aaagacaaaa aaaaaccaa aaaaaaaaaac
 3120
 ctacaaaaaa aactttgttg ctaggattaa ggttattcta attgctttac tctcaggaaa
 3180
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 3240
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 3300
 ctgggctgat agacatttcg tcatttaagt aagggatcga agacatttca aattgctatc
 3360
 tccatctggg ctgatccaaa attctgagat tgttggttac ctatattttg ttgcagcttt
 3420
 taaatgtact ctgaacttcc aaaccacatt cattccagcc tggtagaaca aatattcttg
 3480
 gatctttgat caaagcctgg aatgatagct ttaatacaaa aaaa
 3524

<210> 2624

<211> 895

<212> PRT

<213> Homo sapiens

<400> 2624

Met Lys Ile Gly Ser Gly Phe Leu Ser Gly Gly Gly Gly Thr Gly Ser

1

5

10

15

Ser Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly

20 25 30
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 35 40 45
 Gly Met Val Met Phe Asn His Arg Leu Pro Pro Val Thr Ser Phe Thr
 50 55 60
 Arg Pro Ala Gly Ser Ala Ala Pro Pro Pro Gln Cys Val Leu Ser Ser
 65 70 75 80
 Ser Thr Ser Ala Ala Pro Ala Ala Glu Pro Pro Pro Pro Ala Pro
 85 90 95
 Asp Met Thr Phe Lys Lys Glu Pro Ala Ala Ser Ala Ala Phe Pro
 100 105 110
 Ser Gln Arg Thr Ser Trp Gly Phe Leu Gln Ser Leu Val Ser Ile Lys
 115 120 125
 Gln Glu Lys Pro Ala Asp Pro Glu Glu Gln Gln Ser His His His His
 130 135 140
 His His His His Tyr Gly Gly Leu Phe Ala Gly Ala Glu Glu Arg Ser
 145 150 155 160
 Pro Gly Leu Gly Gly Gly Glu Gly Gly Ser His Gly Val Ile Gln Asp
 165 170 175
 Leu Ser Ile Leu His Gln His Val Gln Gln Gln Pro Ala Gln His His
 180 185 190
 Arg Asp Val Leu Leu Ser Ser Ser Ser Arg Thr Asp Asp His His Gly
 195 200 205
 Thr Glu Glu Pro Lys Gln Asp Thr Asn Val Lys Lys Ala Lys Arg Pro
 210 215 220
 Lys Pro Glu Ser Gln Gly Ile Lys Ala Lys Arg Lys Pro Ser Ala Ser
 225 230 235 240
 Ser Lys Pro Ser Leu Val Gly Asp Gly Glu Gly Ala Ile Leu Ser Pro
 245 250 255
 Ser Gln Lys Pro His Ile Cys Asp His Cys Ser Ala Ala Phe Arg Ser
 260 265 270
 Ser Tyr His Leu Arg Arg His Val Leu Ile His Thr Gly Glu Arg Pro
 275 280 285
 Phe Gln Cys Ser Gln Cys Ser Met Gly Phe Ile Gln Lys Tyr Leu Leu
 290 295 300
 Gln Arg His Glu Lys Ile His Ser Arg Glu Lys Pro Phe Gly Cys Asp
 305 310 315 320
 Gln Cys Ser Met Lys Phe Ile Gln Lys Tyr His Met Glu Arg His Lys
 325 330 335
 Arg Thr His Ser Gly Glu Lys Pro Tyr Lys Cys Asp Thr Cys Gln Gln
 340 345 350
 Tyr Phe Ser Arg Thr Asp Arg Leu Leu Lys His Arg Arg Thr Cys Gly
 355 360 365
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 Gly Ile Ile Gly Thr Gly Ile Asp Glu Leu Gln Lys Arg Val Pro Lys

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Gly Lys Pro Ser Gly Ser Leu Gly Ile Val Ser Asn Asn Ser Val Glu		
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Thr Ile Gly Leu Leu Gln Ser Thr Ser Gly Lys Gln Gly Gln Ile Ser		
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Ser Asn Tyr Asp Asp Ala Met Gln Phe Ser Lys Lys Arg Arg Tyr Leu		
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Pro Thr Ala Ser Ser Asn Ser Ala Phe Ser Ile Asn Val Gly His Met		
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Val Ser Gln Gln Ser Val Ile Gln Ser Ala Gly Val Ser Val Leu Asp		
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Asn Glu Ala Pro Leu Ser Leu Ile Asp Ser Ser Ala Leu Asn Ala Glu		
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Ile Lys Ser Cys His Asp Lys Ser Gly Ile Pro Asp Glu Val Leu Gln		
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Ser Ile Leu Asp Gln Tyr Ser Asn Lys Ser Glu Ser Gln Lys Glu Asp		
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Pro Phe Asn Ile Ala Glu Pro Arg Val Asp Leu His Thr Ser Gly Glu		
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His Ser Glu Leu Val Gln Glu Glu Asn Leu Ser Pro Gly Thr Gln Thr		
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Pro Ser Asn Asp Lys Ala Ser Met Leu Gln Glu Tyr Ser Lys Tyr Leu		
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Gln Gln Ala Phe Glu Lys Ser Thr Asn Ala Ser Phe Thr Leu Gly His		
	675	680
		685
Gly Phe Gln Phe Val Ser Leu Ser Ser Pro Leu His Asn His Thr Leu		
	690	695
		700
Phe Pro Glu Lys Gln Ile Tyr Thr Thr Ser Pro Leu Glu Cys Gly Phe		
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Gly Gln Ser Val Thr Ser Val Leu Pro Ser Ser Leu Pro Lys Pro Pro		
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Phe Gly Met Leu Phe Gly Ser Gln Pro Gly Leu Tyr Leu Ser Ala Leu		
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	755	760
		765
Ile Asp Ser Gln Lys Asn Leu Glu Thr Ser Ser Ala Phe Gln Ser Ser		
	770	775
		780
Ser Gln Lys Leu Thr Ser Gln Lys Glu Gln Lys Asn Leu Glu Ser Ser		
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Thr Gly Phe Gln Ile Pro Ser Gln Glu Leu Ala Ser Gln Ile Asp Pro		
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Gln Lys Asp Ile Glu Pro Arg Thr Thr Tyr Gln Ile Glu Asn Phe Ala		
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Gln Ala Phe Gly Ser Gln Phe Lys Ser Gly Ser Arg Val Pro Met Thr		
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		845
Phe Ile Thr Asn Ser Asn Gly Glu Val Asp His Arg Val Arg Thr Ser		
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		860
Val Ser Asp Phe Ser Gly Tyr Thr Asn Met Met Ser Asp Val Ser Glu		
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895

<210> 2625

<211> 1398

<212> DNA

<213> Homo sapiens

<400> 2625

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<210> 2626

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2626

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Arg Ile Val Ala Ala His Asn Lys Cys Pro Arg Asp Gly Arg Phe Val
      35              40              45
Glu Gln Leu Gly Ser Tyr Asp Pro Leu Pro Asn Ser His Gly Glu Lys
  50              55              60
Leu Val Ala Leu Asn Leu Asp Arg Ile Arg His Trp Ile Gly Cys Gly
  65              70              75              80
Ala His Leu Ser Lys Pro Met Glu Lys Leu Leu Gly Leu Ala Gly Phe
      85              90              95
Phe Pro Leu His Pro Met Met Ile Thr Asn Ala Glu Arg Leu Arg Arg
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<212> DNA

<213> Homo sapiens

<400> 2627

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  180
atttagaaac ctgtgagaag caagatatata tgccagaagt ggacaagcag tctggttcgc
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<212> PRT

<213> Homo sapiens

<400> 2628

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      20           25           30
Ala Pro Phe Ser Ser Thr Ser Phe Ser Val Pro Lys Lys Ala Arg Ala
      35           40           45
Asp Cys Thr Cys Ile Ser Thr Ala Glu Leu Phe Ile Cys Asp Ser Ala
      50           55           60
Phe Phe Arg Ser Ser Gly Ser Arg Glu Arg His Ser Phe Lys Val Phe
      65           70           75           80
Phe Leu Cys Ile Pro Pro Pro Leu His Ala
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<210> 2629

<211> 650

<212> DNA

<213> Homo sapiens

<400> 2629

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<210> 2630

<211> 58

<212> PRT

<213> Homo sapiens

<400> 2630

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Met Asp Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met
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Phe Ser Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
      20           25           30
Lys Cys Ala Asn Asp Val Phe Gln Val Gly Ala Arg Asp Gly Gln Gly
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<210> 2631

<211> 5124

<212> DNA

<213> Homo sapiens

<400> 2631

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<210> 2632

<211> 550

<212> PRT

<213> Homo sapiens

<400> 2632

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<211> 1569

<212> DNA

<213> Homo sapiens

<400> 2633

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<211> 59

<212> PRT

<213> Homo sapiens

<400> 2634

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<212> DNA

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<211> 63
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 <213> Homo sapiens

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<400> 2638

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Arg	Asp	Leu	Trp	Met	Phe	Ile	Phe	Ser	Asp	Thr	Met	Leu	Leu	Asn	Ile
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Glu	Pro	Gln	Gln	Glu	Leu	Leu	Gln	Cys	Tyr	Leu	Lys	Asp	Phe	Ile	Leu
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<212> DNA
<213> Homo sapiens

<400> 2639

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<211> 645

<212> PRT

<213> Homo sapiens

<400> 2640

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Gln	Tyr	Thr	Asp	Arg	Leu	Glu	Leu	Gln	Pro	Gly	Ala	Ala	Ser	Gln	Phe
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Ile	Ala	Ala	Thr	Pro	Thr	Ser	Leu	Met	Glu	Ala	Gln	Ala	Glu	Gly	Pro
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Leu	Thr	Ala	Ile	Thr	Ile	Pro	Arg	Pro	Ser	Val	Ala	Ser	Thr	Gln	Ser
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Ser	Gly	Leu	Val	Val	Thr	Glu	Gly	Glu	Pro	Pro	Ser	Gly	Gly	Ser	Arg
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Lys	Leu	Ser	Arg	Gly	Gln	His	Cys	Ile	Glu	Ile	Ser	Ser	Leu	Pro	Gly
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Asp	Leu	Val	Ile	Val	Glu	Lys	Asp	His	Ser	Ala	Thr	Thr	Glu	Pro	Leu
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Asp	Val	Thr	Lys	Thr	Gln	Thr	Phe	Ser	Val	Val	Pro	Asn	Gln	Asp	Lys
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Asn	Asn	Glu	Ile	Met	Lys	Leu	Leu	Thr	Val	Gly	Thr	Ser	Glu	Ile	Ser
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290		295		300	
Gly Lys Arg Glu Lys Ile Thr Pro Arg Asn Gly Glu Leu Phe His Cys					
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Val Ser Glu Asn Glu His Gly Ala Pro Thr Arg Lys Asp Met Val Arg					
	325		330		335
Ser Ser Phe Val Thr Arg His Ser Arg Ile Pro Val Leu Ala Gln Glu					
	340		345		350
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	355		360		365
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Glu Lys Arg Gln Phe Lys Ser Phe Leu Gly Asp Leu Ser Ser Ala Ser					
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Asp Lys Leu Leu Glu Glu Lys Leu Ala Thr Val Pro Ala Pro Phe Cys					
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Glu Glu Glu Val Leu Thr Pro Phe Ser Arg Leu Thr Val Asp Ser His					
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	435		440		445
Ser Arg Lys Ser Lys Ile Pro Arg Pro Val Ser Trp Val Asn Thr Asp					
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Gln Val Asn Ser Ser Thr Ser Ser Gln Phe Phe Pro Arg Pro Pro Pro					
465		470		475	480
Gly Lys Pro Pro Thr Arg Pro Gly Val Glu Ala Arg Leu Arg Arg Tyr					
	485		490		495
Lys Val Leu Gly Ser Ser Asn Ser Asp Ser Asp Leu Phe Ser Arg Leu					
	500		505		510
Ala Gln Ile Leu Gln Asn Gly Ser Gln Lys Pro Arg Ser Thr Thr Gln					
	515		520		525
Cys Lys Ser Pro Gly Ser Pro His Asn Pro Lys Thr Pro Pro Lys Ser					
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Pro Val Val Pro Arg Arg Ser Pro Ser Ala Ser Pro Arg Ser Ser Ser					
545		550		555	560
Leu Pro Arg Thr Ser Ser Ser Pro Ser Arg Ala Gly Arg Pro His					
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	580		585		590
Pro Ser His Ser Gly Ser Ser Ser Ser Arg Arg Ser Cys Gln Gln Glu					
	595		600		605
His Cys Lys Pro Ser Lys Asn Gly Leu Lys Gly Ser Gly Ser Leu His					
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Ser Lys Leu Ser Arg					
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<210> 2641

<211> 744

<212> DNA

<213> Homo sapiens

<400> 2641

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<210> 2642

<211> 176

<212> PRT

<213> Homo sapiens

<400> 2642

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		20					25					30			
Val	Thr	Val	Arg	Ile	His	Gly	Ser	Met	Leu	Arg	Ala	His	Arg	Cys	Val
	35					40					45				
Leu	Ala	Ala	Gly	Ser	Pro	Phe	Phe	Gln	Asp	Lys	Leu	Leu	Leu	Gly	Tyr
	50				55					60					
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<211> 871

<212> PRT

<213> Homo sapiens

<400> 2644

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Asp	Thr	Ala	Leu	Asp	Asn	Cys	Gln	Asp	Leu	Phe	Leu	Leu	Asp	Pro	Pro
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Leu	Ala	Gly	Gly	Ser	Pro	Glu	Ala	Thr	Ser	Pro	Asp	Val	Thr	Glu	Thr
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Lys	Asn	Ser	Pro	Leu	Met	Glu	Asp	Phe	Phe	Glu	Glu	Gly	Phe	Ser	Gln
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Glu	Ile	Ile	Glu	Met	Leu	Ser	Lys	Asp	Gly	Phe	Trp	Asn	Ser	Asn	Phe
			100				105					110			
Gly	Glu	Ala	Cys	Ile	Glu	Asp	Thr	Trp	Leu	Asp	Ser	Leu	Leu	Gly	Asp
		115					120					125			
Pro	Glu	Ser	Leu	Leu	Arg	Ser	Asp	Ile	Ala	Thr	Asn	Gly	Glu	Ser	Pro
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Thr	Glu	Cys	Lys	Ser	His	Glu	Leu	Lys	Arg	Gly	Leu	Ser	Pro	Val	Ser
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Thr	Leu	Thr	Pro	Ala	Lys	Ser	Lys	Glu	Tyr	Arg	Gly	Glu	Phe	Phe	Ser
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Tyr	Ser	Asp	His	Ser	Gln	Gln	Asp	Ser	Val	Gln	Glu	Gly	Glu	Lys	Pro
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Tyr	Gln	Cys	Ser	Glu	Cys	Gly	Lys	Ser	Phe	Ser	Gly	Ser	Tyr	Arg	Leu
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Thr	Gln	His	Trp	Ile	Thr	His	Thr	Arg	Glu	Lys	Pro	Thr	Val	His	Gln
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Lys	Thr	His	Thr	Gly	Tyr	Lys	Phe	Tyr	Val	Cys	Asn	Glu	Tyr	Gly	Thr
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Arg	His	Gln	Lys	Ile	His	Thr	Arg	Lys	Arg	Tyr	Glu	Cys	Ser	Lys	Cys
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Gln	Ala	Thr	Phe	Asn	Leu	Arg	Lys	His	Leu	Ile	Gln	His	Gln	Lys	Thr

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Cys Ser Glu Cys Gly Lys Ala Phe His Arg His Thr His Leu Asn Glu		
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His Arg Arg Ile His Thr Gly Tyr Arg Pro His Lys Cys Gln Glu Cys		
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Val Arg Ser Phe Ser Arg Pro Ser His Leu Met Arg His Gln Ala Ile		
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His Thr Ala Glu Lys Pro Tyr Ser Cys Ala Glu Cys Lys Glu Thr Phe		
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Ser Asp Asn Asn Arg Leu Val Gln His Gln Lys Met His Thr Val Lys		
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His Gln Arg Ile His Ser Arg Val Arg Leu Tyr Lys Trp Gly Glu Gln		
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Gly Lys Ala Ile Ser Ser Ala Ser Leu Ile Lys Leu Gln Ser Phe His		
625	630	635
Thr Lys Glu His Pro Phe Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser		
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Gln Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asp Tyr Cys Gly		
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Lys Ala Phe Gly Leu Ser Ala Glu Leu Val Arg His Gln Arg Ile His		
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Thr Gly Glu Lys Pro Tyr Val Cys Gln Glu Cys Gly Lys Ala Phe Thr		
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Gln Ser Ser Cys Leu Ser Ile His Arg Arg Val His Thr Gly Glu Lys		
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Pro Tyr Arg Cys Gly Glu Cys Gly Lys Ala Phe Ala Gln Lys Ala Asn		

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Leu Thr Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Ser Cys						
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Asn Val Cys Gly Lys Ala Phe Val Leu Ser Ala His Leu Asn Gln His						
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Leu Arg Val His Thr Gln Glu Thr Leu Tyr Gln Cys Gln Arg Cys Gln						
	835		840		845	
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<212> DNA

<213> Homo sapiens

<400> 2645

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Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
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Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Ile Thr Ile Leu Leu Leu Asn
      50           55           60
Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
      65           70           75           80
Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
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Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
      100          105          110
Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
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Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
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Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
      145          150          155          160
Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
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<213> Homo sapiens

<400> 2648

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<212> DNA

<213> Homo sapiens

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<210> 2650

<211> 428

<212> PRT

<213> Homo sapiens

<400> 2650

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Leu	Leu	Phe	Leu	Ala	Phe	Leu	Leu	Leu	Ser	Ser	Arg	Thr	Ala	Arg	Ser
		20						25					30		
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
		35					40					45			
Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
	50				55					60					
Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
65				70					75					80	
Ser	Asn	Val	Asp	Cys	Pro	Pro	Glu	Ala	Gly	Asp	Phe	Arg	Ala	Gln	Gln
		85					90						95		
Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
		100					105					110			
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Cys Gln Ile Val Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu		160
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Asp Asn Cys Gly Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val		175
	180	185
Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr		190
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Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys		205
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Gly Pro Asp His Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys		220
225	230	235
Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser		240
	245	250
Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala		255
	260	265
Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser		270
	275	280
Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg		285
	290	295
Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly		300
305	310	315
Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val		320
	325	330
Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys		335
	340	345
Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly		350
	355	360
Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp		365
	370	375
Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile		380
385	390	395
Gln Ser Pro Gly Ser Phe Leu Cys Gly Gly Gly His Pro Gly Ala Cys		400
	405	410
His Phe Ser Gly Arg Val Glu Met His Val His Pro		415
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<210> 2651

<211> 628

<212> DNA

<213> Homo sapiens

<400> 2651

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120

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300

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<210> 2652

<211> 209

<212> PRT

<213> Homo sapiens

<400> 2652

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			20					25					30		
Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
		35					40					45			
Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
	50					55				60					
Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
65					70					75				80	
Gly	Asp	Ile	Ile	Arg	Leu	Thr	Lys	Gly	Tyr	Ala	Ser	Val	Phe	Lys	Gly
				85					90					95	
Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
			100					105					110		
Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
		115					120					125			
Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
					130		135				140				
Ser	Asn	Pro	Ser	Ala	Ser	Gln	Pro	Thr	Thr	Gly	Pro	Ser	Ala	Ala	Ser
145					150					155				160	
Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
				165					170					175	
Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
			180					185					190		
Ala	Pro	Glu	Ser	Leu	Glu	Ala	Ser	Pro	Thr	Thr	His	Leu	Gln	Ala	Arg
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Leu															

<210> 2653

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 2653

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240
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360
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420
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540
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 1920
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 1980
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 2103

<210> 2654

<211> 70

<212> PRT

<213> Homo sapiens

<400> 2654

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		20					25					30			
Ser	Asp	Ser	Lys	Cys	Leu	Leu	Leu	Gly	Ala	Val	Ala	His	Ala	Cys	
		35				40				45					
Asn	Pro	Ser	Thr	Leu	Gly	Gly	Arg	Gly	Gly	Arg	Ile	Thr	Arg	Ser	Gly
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<210> 2655

<211> 1752

<212> DNA

<213> Homo sapiens

<400> 2655

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1752

<210> 2656

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2656

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 Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met
 35 40 45
 Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg
 50 55 60
 Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
 65 70 75 80
 Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys
 85 90 95
 Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu
 100 105 110
 Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
 115 120 125
 Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His
 130 135 140
 Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg
 145 150 155 160
 Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe
 165 170 175
 Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe
 180 185 190
 Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro
 195 200 205
 Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn
 210 215 220
 Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys
 225 230 235 240
 Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile
 245 250 255
 Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr
 260 265 270
 Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys
 275 280 285
 Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
 290 295 300
 Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
 305 310 315 320
 Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
 325 330 335
 Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
 340 345 350
 Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
 355 360 365
 Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
 370 375 380
 Ala Lys Lys Lys Lys Lys Lys Lys Lys Lys Leu Lys Asp Val Leu Asn
 385 390 395 400
 Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
 405 410 415
 Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

	420		425		430										
Ala	Lys	His	Lys	Lys	His	Lys	Ser	Gly	Lys	Lys	Ser	Val	Ser	Lys	Lys
	435				440						445				
Ala	Ile	Thr	Lys	Lys	Arg	Lys	Thr	Val	Ile	Lys	Ser	Pro	Thr	Val	Pro
	450				455						460				
Glu	Phe	Gln	Leu	Ile	Cys	Thr	Asn	Leu	Asp	Glu	Leu	Arg	Glu	Leu	Ile
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<210> 2657

<211> 972

<212> DNA

<213> Homo sapiens

<400> 2657

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<210> 2658

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2658

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      20           25           30
Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala
      35           40           45
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly
      50           55           60
Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp
65           70           75

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<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

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<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

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 Asn Ser Gln His Met Phe Glu Val Leu Ala Ala Met Asn His Arg Ser
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 Leu Ile Leu Leu Asp Glu Cys Ser Lys Val Val Leu Asp Asn Ile His
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 Gly Cys Pro Leu Arg Ile Met Ile Asn Ile Leu Gln Ser Cys Lys Asp
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 Leu Gln Tyr His Asn Leu Asp Leu Phe Lys Gly Leu Ala Asp Tyr Val
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 Ala Ala Thr Phe Asp Ile Trp Lys Phe Arg Lys Val Leu Phe Ile Leu
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 Ile Leu Phe Glu Asn Leu Gly Phe Arg Pro Val Gly Leu Met Asp Leu
 130 135 140
 Phe Met Lys Arg Ile Val Glu Asp Pro Glu Ser Leu Asn Met Lys Asn
 145 150 155 160
 Ile Leu Ser Ile Leu His Thr Tyr Ser Ser Leu Asn His Val Tyr Lys
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 Cys Gln Asn Lys Glu Gln Phe Val Glu Val Met Ala Ser Ala Leu Thr
 180 185 190
 Gly Tyr Leu His Thr Ile Ser Ser Glu Asn Leu Leu Asp Ala Val Tyr
 195 200 205
 Ser Phe Cys Leu Met Asn Tyr Phe Pro Leu Ala Pro Phe Asn Gln Leu
 210 215 220
 Leu Gln Lys Asp Ile Ile Ser Glu Leu Leu Thr Ser Asp Asp Met Lys
 225 230 235 240
 Asn Ala Tyr Lys Leu His Thr Leu Asp Thr Cys Leu Lys Leu Asp Asp
 245 250 255
 Thr Val Tyr Leu Arg Asp Ile Ala Leu Ser Leu Pro Gln Leu Pro Arg

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Glu	Leu	Pro	Ser	Ser	His	Thr	Asn	Ala	Lys	Val	Ala	Glu	Val	Leu	Ser
	275		280		285										
Ser	Leu	Leu	Gly	Gly	Glu	Gly	His	Phe	Ser	Lys	Asp	Val	His	Leu	Pro
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His	Asn	Tyr	His	Ile	Asp	Phe	Glu	Ile	Arg	Met	Asp	Thr	Asn	Arg	Asn
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Gln	Val	Leu	Pro	Leu	Ser	Asp	Val	Asp	Thr	Thr	Ser	Ala	Thr	Asp	Ile
	325		330		335										
Gln	Arg	Val	Ala	Val	Leu	Cys	Val	Ser	Arg	Ser	Ala	Tyr	Cys	Leu	Gly
	340		345		350										
Ser	Ser	His	Pro	Arg	Gly	Phe	Leu	Ala	Met	Lys	Met	Arg	His	Leu	Asn
	355		360		365										
Ala	Met	Gly	Phe	His	Val	Ile	Leu	Val	Asn	Asn	Trp	Glu	Met	Asp	Lys
	370		375		380										
Leu	Glu	Met	Glu	Asp	Ala	Val	Thr	Phe	Leu	Lys	Thr	Lys	Ile	Tyr	Ser
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<210> 2663

<211> 1024

<212> DNA

<213> Homo sapiens

<400> 2663

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<211> 199

<212> PRT

<213> Homo sapiens

<400> 2664

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 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn
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 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
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 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
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 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
 100 105 110
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
 115 120 125
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
 130 135 140
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
 145 150 155 160
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
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 Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala
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 Ser Gly Ser His Lys Arg Ser
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<210> 2665

<211> 720

<212> DNA

<213> Homo sapiens

<400> 2665

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<210> 2666

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2666

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			20					25					30		
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
	35						40					45			
Gln	Val	Leu	Arg	Arg	Thr	Pro	Arg	Thr	Lys	Met	Phe	Thr	Pro	Pro	Ser
	50					55					60				
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
65					70					75				80	
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
			85					90					95		
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
		100					105						110		
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
		115					120					125			
Glu	Leu	Glu	Leu	Glu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp
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<210> 2667

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2667

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<210> 2668

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2668

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		20						25					30		
Asn	Pro	Phe	Ser	Val	Cys	Pro	Arg	Trp	Val	Pro	Gly	Leu	Cys	Trp	Arg
		35					40					45			
Thr	Arg	His	Phe	Lys	Glu	Ser	Ile	Lys	Phe	Ile	His	Glu	Cys	Arg	Leu
	50					55				60					
Arg	Gly	Glu	Ser	Cys	Leu	Val	His	Cys	Leu	Ala	Gly	Val	Ser	Arg	Ser
65				70					75				80		
Val	Thr	Leu	Val	Ile	Ala	Tyr	Ile	Met	Thr	Val	Thr	Asp	Phe	Gly	Trp
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<210> 2669

<211> 4285

<212> DNA

<213> Homo sapiens

<400> 2669

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<210> 2670

<211> 979

<212> PRT

<213> Homo sapiens

<400> 2670

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Cys	Met	Glu	Lys	Leu	Arg	Asp	Ala	Arg	Leu	Cys	Pro	His	Cys	Ser	Lys
	35						40					45			
Leu	Cys	Cys	Phe	Ser	Cys	Ile	Arg	Arg	Trp	Leu	Thr	Glu	Gln	Arg	Ala
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Gln	Cys	Pro	His	Cys	Arg	Ala	Pro	Leu	Gln	Leu	Arg	Glu	Leu	Val	Asn
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Cys	Arg	Trp	Ala	Glu	Glu	Val	Thr	Gln	Gln	Leu	Asp	Thr	Leu	Gln	Leu
			85					90					95		
Cys	Ser	Leu	Thr	Lys	His	Glu	Glu	Asn	Glu	Lys	Asp	Lys	Cys	Glu	Asn
		100						105					110		
His	His	Glu	Lys	Leu	Ser	Val	Phe	Cys	Trp	Thr	Cys	Lys	Lys	Cys	Ile
	115						120					125			
Cys	His	Gln	Cys	Ala	Leu	Trp	Gly	Gly	Met	His	Gly	Gly	His	Thr	Phe
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Lys	Pro	Leu	Ala	Glu	Ile	Tyr	Glu	Gln	His	Val	Thr	Lys	Val	Asn	Glu
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			165					170						175	
Gln	Glu	Val	Glu	Arg	Asn	Val	Glu	Ala	Val	Arg	Asn	Ala	Lys	Asp	Glu
		180						185					190		
Arg	Val	Arg	Glu	Ile	Arg	Asn	Ala	Val	Glu	Met	Met	Ile	Ala	Arg	Leu
	195					200						205			
Asp	Thr	Gln	Leu	Lys	Asn	Lys	Leu	Ile	Thr	Leu	Met	Gly	Gln	Lys	Thr
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Glu	His	Gln	Leu	Arg	Ser	Cys	Ser	Lys	Ser	Glu	Leu	Ile	Ser	Lys	Ser

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Ser	Glu	Ile	Leu	Met	Met	Phe	Gln	Gln	Val	His	Arg	Lys	Pro	Met	Ala
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Ser	Phe	Val	Thr	Thr	Pro	Val	Pro	Pro	Asp	Phe	Thr	Ser	Glu	Leu	Val
		275					280					285			
Pro	Ser	Tyr	Asp	Ser	Ala	Thr	Phe	Val	Leu	Glu	Asn	Phe	Ser	Thr	Leu
	290				295					300					
Arg	Gln	Arg	Ala	Asp	Pro	Val	Tyr	Ser	Pro	Pro	Leu	Gln	Val	Ser	Gly
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Leu	Cys	Trp	Arg	Leu	Lys	Val	Tyr	Pro	Asp	Gly	Asn	Gly	Val	Val	Arg
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Gly	Tyr	Tyr	Leu	Ser	Val	Phe	Leu	Glu	Leu	Ser	Ala	Gly	Leu	Pro	Glu
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Asp	Pro	Thr	Lys	Asn	Ile	Ile	Arg	Glu	Phe	Ala	Ser	Asp	Phe	Glu	Val
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Gly	Glu	Cys	Trp	Gly	Tyr	Asn	Arg	Phe	Phe	Arg	Leu	Asp	Leu	Leu	Ala
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Gln	Val	Arg	Ser	Pro	Thr	Phe	Phe	Gln	Lys	Ser	Arg	Asp	Gln	His	Trp
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Tyr	Ile	Thr	Gln	Leu	Glu	Ala	Ala	Gln	Thr	Ser	Tyr	Ile	Gln	Gln	Ile
		435					440					445			
Asn	Asn	Leu	Lys	Glu	Arg	Leu	Thr	Ile	Glu	Leu	Ser	Arg	Thr	Gln	Lys
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Ser	Arg	Asp	Leu	Ser	Pro	Asp	Asn	His	Leu	Ser	Pro	Gln	Asn	Asp	
465				470					475					480	
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<212> DNA

<213> Homo sapiens

<400> 2671

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<213> Homo sapiens

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 cctcctccta ctccagtga aaaaggtggc cctattgaat ccaattgaaa accccgacct
 300
 gaagctggcc atcgatcatg tgatcgctcc cttctttgtc aacgctttga tgttttgggt
 360
 agtggacaat ttcctcatga gaaaggggaa gacgaaagct aagctagaag aaaggggagc
 420
 caaccaggac tcgaggaatg ggagcaaggt ccgctaccgg agggccgcat cccacgagga
 480
 gtctgagtct gagatcctga tctcagcgga tgatgagatg gaggagtccg acgtggagga
 540
 ggacctccgc agactgacct cctcaagcc tgtgaagaaa aagaagcacc gctttgggct
 600
 acccgatga cacattccca tgctgggggt gacgggaggg ccccgccagc cgctggtgtg
 660
 cagaggtcat cccacagcat cgttccttac cctctctctg cccttcaccc g
 711

<210> 2676
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 2676
 Met Leu Leu Ile Tyr Val Gly Val Arg Ala Val Ser Val Leu Val Glu
 1 5 10 15
 Trp Gln Gln Trp Glu Ser Leu Arg Phe Gly Glu Tyr Gly Asp Pro Leu
 20 25 30
 Gln Cys Gly Ala Trp Val Gly Gln Cys Ala Leu Tyr Ile Val Ile Met
 35 40 45
 Ile Phe Glu Lys Ser Val Val Phe Ile Val Leu Leu Leu Gln Trp
 50 55 60
 Lys Lys Val Ala Leu Leu Asn Pro Ile Glu Asn Pro Asp Leu Lys Leu
 65 70 75 80
 Ala Ile Val Met Leu Ile Val Pro Phe Phe Val Asn Ala Leu Met Phe
 85 90 95
 Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys
 100 105 110
 Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

115	120	125
Arg Tyr Arg Arg Ala Ala Ser His Glu Glu Ser Glu Ser Glu Ile Leu		
130	135	140
Ile Ser Ala Asp Asp Glu Met Glu Glu Ser Asp Val Glu Glu Asp Leu		
145	150	155
Arg Arg Leu Thr Pro Leu Lys Pro Val Lys Lys Lys Lys His Arg Phe		
165	170	175
Gly Leu Pro Val		
180		

<210> 2677

<211> 735

<212> DNA

<213> Homo sapiens

<400> 2677

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ngcgcgccag gaccgctcct gcaccgaggg tgcccgcgcg gctatggagg ccttccagag
60
ggccgctggt gagggcgcc cgggccgcgg tggggcacgg cgcggtgcca ggggtgtgca
120
gagcccttt tgcagggcag gagctgggga gtggttagga catcagtcct tcaggtaggg
180
ggagttagca catcaggtcc atatgtgtcc caggagcatc cctagtggc cgccctgagt
240
gctgcatggg gcagagatgg gcaggtacac ggccctgcct gtgtgagcac cctccctcc
300
gctggggcct tcagcctcct gagggagaac ttctcccatg cgccgagccc agacatgagc
360
gctgcgtccc tctgcgcact ggagcagctc atgatggccc aggccagga atgtgtgttt
420
gaggcctct caccacctgc ctccatggcc cccaagact gctggccca gctgcgctg
480
gcgcaggagg ccgccaggt gagctcgggc acccgtgtca ggatgcaggg ggtggggccg
540
agctggggtc agagcccagg tccaggcatg cgtgagctct cccacctct tccttgtgtg
600
tcagccccga gccagctgtt gtctgtctcc ctgggggggc tggtcaggaa cctggggacc
660
cgagcctctg cctccaggga atggcacaaa gcagcaggaa ctgaggtgcc agggaggctg
720
ctgggatggt ggtcg
735

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<210> 2678

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2678

Leu Ala Ala Leu Ser Ala Ala Trp Gly Arg Asp Gly Gln Val His Gly
1 5 10 15
Pro Ala Cys Val Ser Thr Pro Pro Ser Ala Gly Ala Phe Ser Leu Leu
20 25 30
Arg Glu Asn Phe Ser His Ala Pro Ser Pro Asp Met Ser Ala Ala Ser

35	40	45
Leu Cys Ala Leu Glu Gln	Leu Met Met Ala Gln	Ala Gln Glu Cys Val
50	55	60
Phe Glu Gly Leu Ser Pro	Pro Ala Ser Met Ala	Pro Gln Asp Cys Leu
65	70	75
Ala Gln Leu Arg Leu Ala	Gln Glu Ala Ala Gln	Val Ser Ser Gly Thr
85	90	95
Arg Val Arg Met Gln Gly	Val Gly Pro Ser Trp	Gly Gln Ser Pro Gly
100	105	110
Pro Gly Met Arg Glu Leu	Ser His Leu Leu Pro	Cys Val Ser Ala Pro
115	120	125
Ser Gln Leu Leu Ser Cys	Ser Leu Gly Gly Leu	Val Arg Asn Leu Gly
130	135	140
Thr Arg Ala Ser Ala Ser	Arg Glu Trp His Lys	Ala Ala Gly Thr Glu
145	150	155
Val Pro Gly Arg Leu Leu	Gly Trp Trp Ser	
165	170	

<210> 2679

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2679

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tgctcctcca agtgatcacc ggagtcacaga tattctgttc aagtcagcca accaggaagg
120
ggctgcagac aaagtgcggc aacagggact ccaccaggcc atggagctca tcccacaaga
180
cgctcaccg cacaggaggg ctgacccag ggaaacgtgt caccaggaca cagcacgaag
240
ctcaaaaggg gctagcatgc tctgtgcagc tgccagactc tgccctgaag aatcacaggg
300
cactctagtg agcgctgcag cagccagcag gcctggatg gccaggtgtg cagtggggag
360
gcacaggggg tgcaccagga cgcagccaga cctgggccag ttcgcgccga ctctctcca
420
ttccagaggt ccaggaagca cctgtcaatg tggaagtcag aatgctcagg ccaaataccg
480
agatcaacta actattcagg ttgaaccaga ggctgggag ggggcatcca actgccacc
540
cgtcagactg agggacgcgt
560

<210> 2680

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2680

Met Glu Leu Ile Pro Gln Asp	Ala Ser Pro His Arg Arg	Ala Asp Pro
1	5	10
Arg Glu Thr Cys His Gln Asp	Thr Ala Arg Ser Ser Lys	Gly Ala Ser

```

      20      25      30
Met Leu Cys Ala Ala Ala Arg Leu Cys Pro Glu Glu Ser Gln Gly Thr
      35      40      45
Leu Val Ser Ala Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
      50      55      60
Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
      65      70      75      80
Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
      85      90      95
Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
      100      105      110
Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
      115      120      125
Arg Leu Arg Asp Ala
      130

```

<210> 2681

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2681

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gattctctag tagccctaata tctaccatc tggctactaa ttcaaacttt cttccttcac
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atctgtttgt ggacttctcc aatataacta gtatgcctgg gtcattctg cttcttctct
120
tctggaatag tttatttcat gaccatgtgc agaggggggtg atggggcaag cctcacaagc
180
cccgagggtc tgtggctgag gtgtaccttg gctttgttgc ctggaactgc tctgactctg
240
ctcttcgtc tttctgggc tgtgtcacta cagctctgac tcctttccac cttggagttt
300
agcttccctg ccaggaaagc taaggagtag gagttgttct tggaacaaa tgccgagcga
360
tgtgtctgtg tcatctggcc tcgagaaggt tcttcattct ctgaatctga gagacgtgca
420
ggacaacgtt ccagatttgt tttcagtact aatggttcat ctcttttttt ctgttcatcc
480
attttccttt tcctgttgc tgtatcctct ggtaacagct tgtggatttg atcttcagag
540
ggtttttctt cttgtaactt ttcttctctc agctttctca agctt
585

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<210> 2682

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2682

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Met Asp Glu Gln Lys Lys Arg Asp Glu Pro Leu Val Leu Lys Thr Asn
  1      5      10      15
Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
      20      25      30
Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys

```



```

      35          40          45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys
  50          55          60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys
  65          70          75          80
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser
      85          90          95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His
      100          105          110
Met Val Met Lys
      115

```

<210> 2683
 <211> 498
 <212> DNA
 <213> Homo sapiens

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<400> 2683
naccggttac actgactcca aaactctcct tgggtggccta ggtgaaacct catggccaac
  60
atcacctgga tggccaacca cactggaagg ttggatttca tcctcatggg actcttcaga
  120
cgatccaaac atccagctct acttagtggt gtcattcttg tggttttcct gatggcggtg
  180
tctgaaaatg ctgtctgat ccttctgata cactgtgaca cctacctcca caccctcatg
  240
tactttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgccc
  300
aagatgctcc tggaccaggt catgggtgtg aataagatct cagccctga gtgtgggatg
  360
cagatgttcc tctatctgac actagcaggt tcggaatttt tccttctage caccatggcc
  420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtctcat gaaccatagg
  480
gtctgtcttt tcctggca
  498

```

<210> 2684
 <211> 149
 <212> PRT
 <213> Homo sapiens

```

<400> 2684
Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe
  1          5          10          15
Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser
  20          25          30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val
  35          40          45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr
  50          55          60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val
  65          70          75          80
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile

```

85 90 95
 Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala
 100 105 110
 Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val
 115 120 125
 Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val
 130 135 140
 Cys Leu Phe Leu Ala
 145

<210> 2685

<211> 391

<212> DNA

<213> Homo sapiens

<400> 2685

ngccggctgc acacgctgcc acctgggctg cctcgaaatg tccatgtgct gaaggtcaag
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 cgcaatgagc tggctgccct ggcacgaggg gcgctggcgg gcatggctca gcttcgggaa
 120
 ctctacctca caggcaaccg actgcgaagc cgggcctctg gccccctgc ctgggtggac
 180
 ctcgcccctc tgcagttgct ggacatcgcc gggaatcagc tcacagagat cccggagggg
 240
 ctccccccat cgctggagta tctgtacctg cagaataaca agattagcgc tgttcctgcc
 300
 agcgcccttg actctactcc caacctcaag gggatcttcc tcaggttcaa caagctggct
 360
 gtgggctccg tagtagaaag cgcttccgg a
 391

<210> 2686

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2686

Xaa Arg Leu His Thr Leu Pro Pro Gly Leu Pro Arg Asn Val His Val
 1 5 10 15
 Leu Lys Val Lys Arg Asn Glu Leu Ala Ala Leu Ala Arg Gly Ala Leu
 20 25 30
 Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu
 35 40 45
 Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu
 50 55 60
 Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly
 65 70 75 80
 Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser
 85 90 95
 Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile
 100 105 110
 Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala
 115 120 125
 Phe Arg

130

<210> 2687
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 2687
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 60
 caggaatggg agtgcaataa atctctaata caagagattg agcctcacca acctccagga
 120
 tgggaaatga caggtaagac agggactaca aaagaccaag cagacaataa aattccccct
 180
 gacagtccgc taggccttat gttaagatac cggaaagata atgaaaggac caaacacaag
 240
 aaaagacagc aaatgataaa atattgctgg tttatttgga ctaaggaacc catcctgaaa
 300
 cctttggctc tttggccaca gttaggggtg agcggggact ggatatgcca actcctaate
 360
 cagtatgtaa aggataaaag tccagtttct caagaggag
 399

<210> 2688
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2688
 Met Thr Gly Lys Thr Gly Thr Thr Lys Asp Gln Ala Asp Asn Lys Ile
 1 5 10 15
 Pro Pro Asp Ser Pro Leu Gly Leu Met Leu Arg Tyr Arg Lys Asp Asn
 20 25 30
 Glu Arg Thr Lys His Lys Lys Arg Gln Gln Met Ile Lys Tyr Cys Trp
 35 40 45
 Phe Ile Trp Thr Lys Glu Pro Ile Leu Lys Pro Leu Val Phe Trp Pro
 50 55 60
 Gln Leu Gly Leu Ser Gly Asp Trp Ile Cys Gln Leu Leu Ile Gln Tyr
 65 70 75 80
 Val Lys Asp Lys Ser Pro Val Ser Gln Glu Glu
 85 90

<210> 2689
 <211> 560
 <212> DNA
 <213> Homo sapiens

<400> 2689
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 60
 gccctgtttc ctcagaaaag atacaaaaat gtgggtctca ccaagttgcc caggtgtgtc
 120
 tcaaaactct ggctcaaga aatcctcctg gttcagcttc acaaagctcc gagattacag
 180

ttgcatgtct gtgacaagct tggaggccga gttgcaagct aagatccaag agagccatcc
 240
 tgaattgcga cgcgtgtact tcaataaggg attgtaaagc agggaggaaa cctctgcagc
 300
 tcattctgcc actgcaaagc tgggtgtagcc atgctgggtga gaaaaatcct gttcaacctg
 360
 ggttggtata tcgtctttga aaaacaatga ctataaaagc tacaggaaag gtatttcagg
 420
 acgtttattg aaggcattgg tggagctctc tgtatgtgtt ttgctctgca gggaactcaa
 480
 agttggcatt cccgtcacgg atgagaatgg gaaccgcttg ggggagtcgg cgaacgctgc
 540
 gaaacaagcc atcacgccag
 560

<210> 2690
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 2690
 Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe Ala Thr
 1 5 10 15
 Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Arg Tyr Lys Asn Val Gly
 20 25 30
 Leu Thr Lys Leu Pro Arg Leu Val Ser Asn Ser Trp Pro Gln Glu Ile
 35 40 45
 Leu Leu Val Gln Pro His Lys Ala Pro Arg Leu Gln Leu His Val Cys
 50 55 60
 Asp Lys Leu Gly Gly Arg Val Ala Ser
 65 70

<210> 2691
 <211> 532
 <212> DNA
 <213> Homo sapiens

<400> 2691
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 60
 caggggggtgc tgaaggccct cgactacatc caccacatgg gatatgtaca caggagtgtc
 120
 aaagccagcc acatcctgat ctctgtggat gggaaggctc acctgtctgg ttgctgcagc
 180
 aacctcagca tgataagcca tgggcagcgg cagcgagtgg tccacgattt tcccaagtac
 240
 agtgtaagg ttctgccgtg gtcagccccc gaggtcctcc agcagaatct ccagggttat
 300
 gatgccaagt ctgacatcta cagtgtggga atcacagcct gtgaactggc caacggccat
 360
 gtccccctta aggatatgcc tgccaccagc atgctgctag agaaactgaa cggcacagt
 420
 ccttgctgtg tggataccag caccatcccc gctgaggagc tgacatgag ccttcgcgc
 480

tcagtggcca actctggcct gactgacagc ctgaccacca gcacaccccg gg
532

<210> 2692

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2692

Asp	Leu	Ile	Cys	Thr	His	Phe	Met	Asp	Gly	Met	Asn	Glu	Leu	Ala	Ile
1				5					10					15	
Ala	Tyr	Ile	Leu	Gln	Gly	Val	Leu	Lys	Ala	Leu	Asp	Tyr	Ile	His	His
			20					25					30		
Met	Gly	Tyr	Val	His	Arg	Ser	Val	Lys	Ala	Ser	His	Ile	Leu	Ile	Ser
		35					40					45			
Val	Asp	Gly	Lys	Val	Tyr	Leu	Ser	Gly	Leu	Arg	Ser	Asn	Leu	Ser	Met
		50				55					60				
Ile	Ser	His	Gly	Gln	Arg	Gln	Arg	Val	Val	His	Asp	Phe	Pro	Lys	Tyr
65					70					75				80	
Ser	Val	Lys	Val	Leu	Pro	Trp	Leu	Ser	Pro	Glu	Val	Leu	Gln	Gln	Asn
			85					90					95		
Leu	Gln	Gly	Tyr	Asp	Ala	Lys	Ser	Asp	Ile	Tyr	Ser	Val	Gly	Ile	Thr
			100					105					110		
Ala	Cys	Glu	Leu	Ala	Asn	Gly	His	Val	Pro	Phe	Lys	Asp	Met	Pro	Ala
		115					120					125			
Thr	Gln	Met	Leu	Leu	Glu	Lys	Leu	Asn	Gly	Thr	Val	Pro	Cys	Leu	Leu
		130				135					140				
Asp	Thr	Ser	Thr	Ile	Pro	Ala	Glu	Glu	Leu	Thr	Met	Ser	Pro	Ser	Arg
145					150					155				160	
Ser	Val	Ala	Asn	Ser	Gly	Leu	Ser	Asp	Ser	Leu	Thr	Thr	Ser	Thr	Pro
			165					170						175	

Arg

<210> 2693

<211> 798

<212> DNA

<213> Homo sapiens

<400> 2693

gcgttcaga atctcaccag ccttgtggtg ctgcatttgc ataacaaccg catccagcat
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ctggggaccc acagcttcga ggggctgcac aatctggaga cactagacct gaattataac
120
aagctgcagg agttccctgt ggccatccgg accctgggca gactgcagga actggggttc
180
cataacaaca acatcaaggc catcccagaa aaggccttca tggggaaccc tctgctacag
240
acgatacact ttatgataa cccaatccag tttgtgggaa gatcggcatt ccagtacctg
300
cctaaactcc acacactatc tctgaatggt gccatggaca tccaggagtt tccagatctc
360
aaaggcacca ccagcctgga gatcctgacc ctgacccgcg caggcatccg gctgctccca
420

tcggggatgt gccaacagct gccagagctc cgagtctctg aactgtctca caatcaaatt
 480
 gaggagctgc ccagcctgca caggtgtcag aaattggagg aaatcggcct ccaacacaaac
 540
 cgcattctggg aaattggagc tgacaccttc agccagctga gctccctgca agccctggat
 600
 ttaaggtgga acgccatccg gtccatccac cccgaggcct tctccaccct gcactccctg
 660
 gtcaagctgg acctgacaga caaccagctg accaactgac ccctggctgg acttggggggc
 720
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 780
 ttcccaaaac tgaggatc
 798

<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

Ala	Phe	Gln	Asn	Leu	Thr	Ser	Leu	Val	Val	Leu	His	Leu	His	Asn	Asn
1			5						10					15	
Arg	Ile	Gln	His	Leu	Gly	Thr	His	Ser	Phe	Glu	Gly	Leu	His	Asn	Leu
		20						25					30		
Glu	Thr	Leu	Asp	Leu	Asn	Tyr	Asn	Lys	Leu	Gln	Glu	Phe	Pro	Val	Ala
		35					40					45			
Ile	Arg	Thr	Leu	Gly	Arg	Leu	Gln	Glu	Leu	Gly	Phe	His	Asn	Asn	Asn
	50					55					60				
Ile	Lys	Ala	Ile	Pro	Glu	Lys	Ala	Phe	Met	Gly	Asn	Pro	Leu	Leu	Gln
65					70					75					80
Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala
				85					90					95	
Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met
			100					105					110		
Asp	Ile	Gln	Glu	Phe	Pro	Asp	Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	Ile
		115					120					125			
Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys
		130				135						140			
Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile
145					150					155				160	
Glu	Glu	Leu	Pro	Ser	Leu	His	Arg	Cys	Gln	Lys	Leu	Glu	Glu	Ile	Gly
			165						170					175	
Leu	Gln	His	Asn	Arg	Ile	Trp	Glu	Ile	Gly	Ala	Asp	Thr	Phe	Ser	Gln
			180				185					190			
Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser
		195					200					205			
Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp
		210					215					220			
Leu	Thr	Asp	Asn	Gln	Leu	Thr	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly
225					230					235				240	
Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe
			245						250					255	
Ser	Lys	Asp	Ser	Phe	Pro	Lys	Leu	Arg	Ile						

260

265

<210> 2695

<211> 2265

<212> DNA

<213> Homo sapiens

<400> 2695

nagccagagg gacgagctag cccgacgatg gccagggga cattgatccg tgtgaccca
60
gagcagccca cccatgccgt gtgtgtgctg ggcacottga ctgagcttga catctgcagc
120
tctgcccctg aggactgcac gtccttcagc atcaacgcct cccaggggt ggtcgtggat
180
attgcccaca gccctccagc caagaagaaa tccacagggt cctccacatg gccctggac
240
cctggggtag aggtgacct gacgatgaaa gcggccagt gtagcacagg cgaccagaag
300
gttcagattt catactacgg acccaagact ccaccagtca aagctctact ctacctcacc
360
gcggtggaaa tctccctgtg cgagacatc acccgaccg gcaaagtga gccaccaga
420
gctgtgaaag atcagaggac ctggacctgg ggccttctgt gacaggggtc catcctgctg
480
gtgaactgtg acagagacaa tctcgaatct tctgccatgg actgcgagga tgatgaagtg
540
cttgacagcg aagacctgca ggacatgtcg ctgatgacc tgagcacgaa gaccccaag
600
gacttcttca caaacatac actggtgctc cacgtggcca ggtctgagat ggacaaagt
660
agggtgttcc aggccacag gggcaactg tctccaagt gcagcgtagt cttgggtccc
720
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<210> 2696

<211> 663

<212> PRT

<213> Homo sapiens

<400> 2696

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			20					25					30		
Ala	Pro	Glu	Asp	Cys	Thr	Ser	Phe	Ser	Ile	Asn	Ala	Ser	Pro	Gly	Val
		35					40					45			
Val	Val	Asp	Ile	Ala	His	Ser	Pro	Pro	Ala	Lys	Lys	Lys	Ser	Thr	Gly
		50				55					60				
Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
65				70					75					80	
Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
			85					90					95		
Tyr	Gly	Pro	Lys	Thr	Pro	Pro	Val	Lys	Ala	Leu	Leu	Tyr	Leu	Thr	Ala
			100					105					110		
Val	Glu	Ile	Ser	Leu	Cys	Ala	Asp	Ile	Thr	Arg	Thr	Gly	Lys	Val	Lys
		115					120					125			
Pro	Thr	Arg	Ala	Val	Lys	Asp	Gln	Arg	Thr	Trp	Thr	Trp	Gly	Pro	Cys

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Gly Gln Gly Ala Ile Leu Leu Val Asn Cys Asp Arg Asp Asn Leu Glu				
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Ser Ser Ala Met Asp Cys Glu Asp Asp Glu Val Leu Asp Ser Glu Asp				
	165		170	175
Leu Gln Asp Met Ser Leu Met Thr Leu Ser Thr Lys Thr Pro Lys Asp				
	180		185	190
Phe Phe Thr Asn His Thr Leu Val Leu His Val Ala Arg Ser Glu Met				
	195		200	205
Asp Lys Val Arg Val Phe Gln Ala Thr Arg Gly Lys Leu Ser Ser Lys				
	210		215	220
Cys Ser Val Val Leu Gly Pro Lys Trp Pro Ser His Tyr Leu Met Val				
225		230		235
Pro Gly Gly Lys His Asn Met Asp Phe Tyr Val Glu Ala Leu Ala Phe				
	245		250	255
Pro Asp Thr Asp Phe Pro Gly Leu Ile Thr Leu Thr Ile Ser Leu Leu				
	260		265	270
Asp Thr Ser Asn Leu Glu Leu Pro Glu Ala Val Val Phe Gln Asp Ser				
	275		280	285
Val Val Phe Arg Val Ala Pro Trp Ile Met Thr Pro Asn Thr Gln Pro				
	290		295	300
Pro Gln Glu Val Tyr Ala Cys Ser Ile Phe Glu Asn Glu Asp Phe Leu				
305		310		315
Lys Ser Val Thr Thr Leu Ala Met Lys Ala Lys Cys Lys Leu Thr Ile				
	325		330	335
Cys Pro Glu Glu Glu Asn Met Asp Asp Gln Trp Met Gln Asp Glu Met				
	340		345	350
Glu Ile Gly Tyr Ile Gln Ala Pro His Lys Thr Leu Pro Val Val Phe				
	355		360	365
Asp Ser Pro Arg Asn Arg Gly Leu Lys Glu Phe Pro Ile Lys Arg Val				
	370		375	380
Met Gly Pro Asp Phe Gly Tyr Val Thr Arg Gly Pro Gln Thr Gly Gly				
385		390		395
Ile Ser Gly Leu Asp Ser Phe Gly Asn Leu Glu Val Ser Pro Pro Val				
	405		410	415
Thr Val Arg Gly Lys Glu Tyr Pro Leu Gly Arg Ile Leu Phe Gly Asp				
	420		425	430
Ser Cys Tyr Pro Ser Asn Asp Ser Arg Gln Met His Gln Ala Leu Gln				
	435		440	445
Asp Phe Leu Ser Ala Gln Gln Val Gln Ala Pro Val Lys Leu Tyr Ser				
	450		455	460
Asp Trp Leu Ser Val Gly His Val Asp Glu Phe Leu Ser Phe Val Pro				
465		470		475
Ala Pro Asp Arg Lys Gly Phe Arg Leu Leu Ala Ser Pro Arg Ser				
	485		490	495
Cys Tyr Lys Leu Phe Gln Glu Gln Gln Asn Glu Gly His Gly Glu Ala				
	500		505	510
Leu Leu Phe Glu Gly Ile Lys Lys Lys Lys Gln Gln Lys Ile Lys Asn				
	515		520	525
Ile Leu Ser Asn Lys Thr Leu Arg Glu His Asn Ser Phe Val Glu Arg				
	530		535	540
Cys Ile Asp Trp Asn Arg Glu Leu Leu Lys Arg Glu Leu Gly Leu Ala				
545		550		555
Glu Ser Asp Ile Ile Asp Ile Pro Gln Leu Phe Lys Leu Lys Glu Phe				

	565		570		575										
Ser	Lys	Ala	Glu	Ala	Phe	Phe	Pro	Asn	Met	Val	Asn	Met	Leu	Val	Leu
	580						585						590		
Gly	Lys	His	Leu	Gly	Ile	Pro	Lys	Pro	Phe	Gly	Pro	Val	Ile	Asn	Gly
	595						600						605		
Arg	Cys	Cys	Leu	Glu	Glu	Lys	Val	Cys	Ser	Leu	Leu	Glu	Pro	Leu	Gly
	610						615						620		
Leu	Gln	Cys	Thr	Phe	Ile	Asn	Asp	Phe	Phe	Thr	Tyr	His	Ile	Arg	His
	625					630				635				640	
Gly	Glu	Val	His	Cys	Gly	Thr	Asn	Val	Arg	Arg	Lys	Pro	Phe	Ser	Phe
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Lys	Trp	Trp	Asn	Met	Val	Pro									
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<210> 2697

<211> 2468

<212> DNA

<213> Homo sapiens

<400> 2697

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120
gtaactgacc ccaggaacat tctgttaacc aacgaacaac tcgagagtgc gagaaaaata
180
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300
ggaagaatgt cagcccaggt tcccatgaac atgaccatca caggttgat gatgacgttt
360
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420
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720
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1020

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2468

<210> 2698

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2698

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 35 40 45
 Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr
 50 55 60
 Arg Gln Gly Ile Val Pro Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg
 65 70 75 80
 Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys
 85 90 95
 Met Ile Leu Ile Gly Arg Met Ser Ala Gln Val Pro Met Asn Met Thr
 100 105 110
 Ile Thr Gly Cys Met Met Thr Phe Tyr Arg Thr Thr Pro Ala Val Leu
 115 120 125
 Phe Trp Gln Trp Ile Asn Gln Ser Phe Asn Ala Val Val Asn Tyr Thr
 130 135 140
 Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala
 145 150 155 160
 Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala Leu Gly Leu Asn
 165 170 175
 Ala Leu Thr Lys His Val Ser Pro Leu Ile Gly Arg Phe Val Pro Phe
 180 185 190
 Ala Ala Val Ala Ala Ala Asn Cys Ile Asn Ile Pro Leu Met Arg Gln
 195 200 205
 Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg
 210 215 220
 Leu Gly Glu Ser Ala Asn Ala Ala Lys Gln Ala Ile Thr Gln Val Val
 225 230 235 240
 Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe
 245 250 255
 Ile Met Asn Thr Leu Glu Lys Lys Ala Phe Leu Lys Arg Phe Pro Trp
 260 265 270
 Met Ser Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe
 275 280 285
 Ala Thr Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Ser Ser Met Ser
 290 295 300
 Val Thr Ser Leu Glu Ala Glu Leu Gln Ala Lys Ile Gln Glu Ser His
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 Pro Glu Leu Arg Arg Val Tyr Phe Asn Lys Gly Leu
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<210> 2699

<211> 974

<212> DNA

<213> Homo sapiens

<400> 2699

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 120
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 360
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 420
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 480
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 974

<210> 2700

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2700

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Pro	Glu	Leu	Pro	Asp	Ile	Leu	Lys	Gln	Phe	Thr	Lys	Ala	Ala	Ile	Arg
		20					25					30			
Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
	35					40					45				
Leu	Ser	Arg	Gly	Asp	Pro	Leu	Pro	Val	Lys	Asp	Arg	Met	Glu	Met	Pro
	50					55					60				
Val	Ala	Thr	Gln	Lys	Thr	Asp	Thr	Gly	Leu	Thr	Gln	Gly	Leu	Leu	Lys
65				70					75					80	
Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
		85						90					95		
Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
		100					105						110		
Ala	Leu	Leu	Gln	Leu	Asp	Pro	Cys	Glu	Asn	Lys	Ile	Lys	Trp	Ile	Asn

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      115              120              125
Phe Leu Ala Leu Gly Cys Ser Met Leu Gly Gly Ser Leu Asn Thr Ala
      130              135              140
Leu Lys His Leu Cys Glu Ile Leu Thr Asp Asp Pro Glu Ala Gly Pro
145              150              155              160
Leu Ala Ser Pro Ser Arg Arg Phe Pro Thr Phe Thr Ala Thr Trp Pro
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<210> 2701
 <211> 646
 <212> DNA
 <213> Homo sapiens

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<400> 2701
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180
cccagcactt tgggaggcca aaatgccagc agctcttcct tgccagagat gatctgaccc
240
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300
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360
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420
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480
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540
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646

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<210> 2702
 <211> 92
 <212> PRT
 <213> Homo sapiens

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<400> 2702
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Leu Gly Pro Gly Asp Gln Glu Ser Arg Trp Lys Gln Tyr Leu Glu Asp
      20      25      30
Glu Arg Ile Ala Leu Phe Leu Gln Asn Glu Glu Phe Met Lys Glu Leu
      35      40      45
Gln Arg Asn Arg Asp Phe Leu Leu Ala Leu Glu Arg Asp Arg Leu Lys
      50      55      60
Tyr Glu Ser Gln Lys Ser Lys Ser Ser Ser Val Ala Val Gly Asn Asp

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<210> 2705

<211> 843

<212> DNA

<213> Homo sapiens

<400> 2705

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120
gacatcaaca tccaggaacc tcgctgggac caaagtactt tcctgggcag agcccggcac
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<210> 2706

<211> 251

<212> PRT

<213> Homo sapiens

<400> 2706

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20          25          30
Thr Val Thr Asp Pro Arg Asn Leu Leu Leu Ser Gly Ala Gln Leu Glu
35          40          45
Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Ala Gly Val Val Thr Pro
50          55          60
Gly Ile Thr Glu Asp Gln Leu Trp Arg Ala Lys Tyr Val Tyr Asp Ser
65          70          75          80
Ala Phe His Pro Asp Thr Gly Glu Lys Val Val Leu Ile Gly Arg Met

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	85		90		95										
Ser	Ala	Gln	Val	Pro	Met	Asn	Met	Thr	Ile	Thr	Gly	Cys	Met	Leu	Thr
	100							105					110		
Phe	Tyr	Arg	Lys	Thr	Pro	Thr	Val	Val	Phe	Trp	Gln	Trp	Val	Asn	Gln
	115						120					125			
Ser	Phe	Asn	Ala	Ile	Val	Asn	Tyr	Ser	Asn	Arg	Ser	Gly	Asp	Thr	Pro
	130					135					140				
Ile	Thr	Val	Arg	Gln	Leu	Gly	Thr	Ala	Tyr	Val	Ser	Ala	Thr	Thr	Gly
145					150					155				160	
Ala	Val	Ala	Thr	Ala	Leu	Gly	Leu	Lys	Ser	Leu	Thr	Lys	His	Leu	Pro
			165					170					175		
Pro	Leu	Val	Gly	Arg	Phe	Val	Pro	Phe	Ala	Ala	Val	Ala	Ala	Ala	Asn
		180					185				190				
Cys	Ile	Asn	Ile	Pro	Leu	Met	Arg	Gln	Arg	Glu	Leu	Gln	Val	Gly	Ile
	195						200				205				
Pro	Val	Thr	Asp	Glu	Ala	Gly	Gln	Arg	Leu	Gly	His	Ser	Val	Thr	Ala
	210					215					220				
Ala	Lys	Gln	Gly	Ile	Phe	Gln	Val	Val	Val	Ser	Arg	Ile	Gly	Met	Ala
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Ile	Pro	Ala	Met	Ala	Ile	Pro	Pro	Val	Ile	Met					
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<210> 2707

<211> 2921

<212> DNA

<213> Homo sapiens

<400> 2707

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<213> Homo sapiens

<400> 2709

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 Ala Ser Gln Ser Gly Ser Ser Pro Pro Gln Asp Trp Ile Glu Glu Lys
 180 185 190
 Leu Gln Gln Val Cys Glu Asp Leu Gly Ile Thr Pro Asp Gly His Leu
 195 200 205
 Asn Arg Lys Lys Leu Val Ser Ile Cys Glu Gln Tyr Gly Leu Gln Asn
 210 215 220
 Val Asp Gly Glu Met Leu Glu Glu Val Phe His Asn Leu Asp Pro Asp
 225 230 235 240
 Gly Thr Met Ser Val Glu Asp Phe Phe Tyr Gly Leu Phe Lys Asn Gly
 245 250 255
 Lys Ser Leu Thr Pro Ser Ala Ser Thr Pro Tyr Arg Gln Leu Lys Arg
 260 265 270
 His Leu Ser Met Gln Ser Phe Asp Glu Ser Gly Arg Arg Thr Thr Thr
 275 280 285
 Ser Ser Ala Thr Thr Ser Thr Ile Gly Phe Arg Val Phe Ser Cys Leu
 290 295 300
 Asp Asp Gly Met Gly His Ala Ser Val Glu Arg Ile Leu Asp Thr Trp
 305 310 315 320
 Gln Glu Glu Gly Ile Glu Asn Ser Gln Glu Ile Leu Lys Ala Leu Asp
 325 330 335
 Phe Ser Leu Asp Gly Asn Ile Asn Leu Thr Glu Leu Thr Leu Ala Leu
 340 345 350
 Glu Asn Glu Leu Leu Val Thr Lys Asn Ser Ile His Gln Ala Ala Leu
 355 360 365
 Ala Ser Phe Lys Ala Glu Ile Arg His Leu Leu Glu Arg Val Asp Gln
 370 375 380
 Val Val Arg Glu Lys Arg Ser Tyr Gly Arg Ile Trp Thr Ala Glu Lys
 385 390 395 400
 Leu Lys Ser Leu Met Ala Ser Glu Val Asp Asp His Asp Ala Ala Ile

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Glu	Arg	Ile	Ala	Ala	Leu	Lys	Asn	Glu	Leu	Arg	Lys	Glu	Arg	Glu	Gln						
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Ile	Leu	Gln	Gln	Ala	Gly	Lys	Gln	Arg	Leu	Glu	Leu	Glu	Gln	Glu	Ile						
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Glu	Lys	Ala	Lys	Thr	Glu	Glu	Asn	Tyr	Ile	Arg	Asp	Arg	Leu	Ala	Leu						
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Ser	Leu	Lys	Glu	Asn	Ser	Arg	Leu	Glu	Asn	Glu	Leu	Leu	Glu	Asn	Ala						
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Glu	Lys	Leu	Ala	Glu	Tyr	Glu	Asn	Leu	Thr	Asn	Lys	Leu	Gln	Arg	Asn						
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Ala	Glu	Phe	Phe	Leu	Gln	Glu	Glu	Arg	Leu	Thr	Gln	Met	Arg	Asn	Glu						
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Tyr	Glu	Arg	Gln	Cys	Arg	Val	Leu	Gln	Asp	Gln	Val	Asp	Glu	Leu	Gln						
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Ser	Glu	Leu	Glu	Glu	Tyr	Arg	Ala	Gln	Gly	Arg	Val	Leu	Arg	Leu	Pro						
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Glu	Pro	Glu	His	Gly	Leu	Gly	Ser	Glu	Glu	Cys	Asn	Pro	Leu	Asn	Met						
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Arg	Asp	Ile	Cys	Cys	Leu	Arg	Leu	Glu	Leu	Glu	Asp	Lys	Val	Arg	His						
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Tyr	Glu	Lys	Gln	Leu	Asp	Glu	Thr	Val	Val	Ser	Cys	Lys	Lys	Ala	Gln						
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Glu	Asn	Met	Lys	Gln	Arg	His	Glu	Asn	Glu	Thr	His	Thr	Leu	Glu	Glu						
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Gln	Ile	Ser	Asp	Leu	Lys	Met	Lys	Ile	Ala	Glu	Leu	Gln	Gly	Gln	Ala						
				675				680				685									
Ala	Val	Leu	Lys	Glu	Ala	His	His	Glu	Ala	Thr	Cys	Arg	His	Glu	Glu						
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Glu	Lys	Lys	Gln	Leu	Gln	Val	Lys	Leu	Glu	Glu	Glu	Lys	Thr	His	Leu						
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Gln	Glu	Lys	Leu	Arg	Leu	Gln	His	Glu	Met	Glu	Leu	Lys	Ala	Arg	Leu						
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Thr	Gln	Ala	Gln	Ala	Ser	Phe	Gly	Arg	Glu	Arg	Glu	Gly	Leu	Gln	Ser						
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Ser	Ala	Trp	Thr	Glu	Glu	Lys	Val	Arg	Gly	Leu	Thr	Gln	Glu	Leu	Glu						
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Gln	Phe	His	Gln	Glu	Gln	Leu	Thr	Ser	Leu	Val	Glu	Lys	His	Thr	Leu						
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Leu Lys Asp Leu Gln Glu Gln Gln Arg Glu Glu Lys Ser Gln Trp Glu		
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Phe Glu Lys Asp Glu Leu Thr Gln Glu Cys Ala Glu Ala Gln Glu Leu		
870	875	880
Leu Lys Glu Thr Leu Lys Arg Glu Lys Thr Thr Ser Leu Val Leu Thr		
885	890	895
Gln Glu Arg Glu Met Leu Glu Lys Thr Tyr Lys Asp His Leu Asn Ser		
900	905	910
Met Val Val Glu Arg Gln Gln Leu Leu Gln Asp Leu Glu Asp Leu Arg		
915	920	925
Asn Val Ser Glu Thr Gln Gln Ser Leu Leu Ser Asp Gln Ile Leu Glu		
930	935	940
Leu Lys Ser Ser His Lys Arg Glu Leu Arg Glu Arg Glu Glu Val Leu		
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Cys Gln Gln Gly Val Ser Glu Gln Leu Ala Ser Gln Arg Leu Glu Arg		
965	970	975
Leu Glu Met Glu His Asp Gln Glu Arg Gln Glu Met Met Ser Lys Leu		
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Leu Ala Met Glu Asn Ile His Lys Ala Thr Cys Glu Thr Ala Asp Arg		
995	1000	1005
Glu Arg Ala Glu Met Ser Thr Glu Ile Ser Arg Leu Gln Ser Lys Ile		
1010	1015	1020
Lys Glu Met Gln Gln Ala Thr Ser Pro Leu Ser Met Leu Gln Ser Gly		
1025	1030	1035
Cys Gln Val Ile Gly Glu Glu Glu Val Glu Gly Asp Gly Ala Leu Ser		
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Leu Leu Gln Lys Gly Glu Gln Leu Leu Glu Glu Asn Gly Asp Val Leu		
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Leu Ser Leu Gln Arg Ala His Glu Gln Ala Val Lys Glu Asn Val Lys		
1075	1080	1085
Met Ala Thr Glu Ile Ser Arg Leu Gln Gln Arg Leu Gln Lys Leu Glu		
1090	1095	1100
Pro Gly Leu Val Met Ser Ser Cys Leu Asp Glu Pro Ala Thr Glu Phe		
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Phe Gly Asn Thr Ala Glu Gln Thr Glu Pro Phe Leu Gln Gln Asn Arg		
1125	1130	1135
Thr Lys Gln Val Glu Gly Val Thr Arg Arg His Val Leu Ser Asp Leu		
1140	1145	1150
Glu Asp Asp Glu Val Arg Asp Leu Gly Ser Thr Gly Thr Ser Ser Val		
1155	1160	1165
Gln Arg Gln Glu Val Lys Ile Glu Glu Ser Glu Ala Ser Val Glu Gly		
1170	1175	1180
Phe Ser Glu Leu Glu Asn Ser Glu Glu Thr Arg Thr Glu Ser Trp Glu		
1185	1190	1195
Leu Lys Asn His Ile Ser Leu Leu Gln Glu Gln Leu Met Met Phe Cys		
1205	1210	1215
Ala Asp Cys Asp Leu Ala Ser Glu Lys Lys Gln Glu Leu Leu Phe Asp		
1220	1225	1230
Val Ser Val Leu Lys Lys Lys Leu Lys Ile Leu Glu Arg Ile Pro Glu		
1235	1240	1245
Ala Ser Pro Arg Tyr Lys Leu Leu Tyr Glu Asp Val Ser Arg Glu Asn		
1250	1255	1260
Asp Cys Leu Gln Glu Glu Leu Glu Met Met Glu Thr Arg Tyr Asp Glu		

1265	1270	1275	1280
Ala Leu Glu Asn Asn Lys Glu Leu Thr	Ala Glu Val Phe Arg Leu Gln		
1285	1290	1295	
Asp Glu Leu Lys Lys Met Glu Glu Val Thr Glu Thr Phe Leu Ser Leu			
1300	1305	1310	
Glu Lys Ser Tyr Asp Glu Val Lys Ile Glu Asn Glu Glu Leu Asn Val			
1315	1320	1325	
Leu Val Leu Arg Leu Gln Gly Lys Ile Glu Lys Leu Xaa Thr Arg Ala			
1330	1335	1340	
Trp Ser Ser Gly Val Thr Ala Ala Tyr Gly Lys Xaa Ser Leu Glu Asn			
1345	1350	1355	1360
Leu Glu Ile Glu Pro Asp Gly Asn Ile Leu Gln Leu Asn Gln Thr Leu			
1365	1370	1375	
Glu Glu Cys Val Pro Arg Val Arg Ser Val His His Val Ile Glu Glu			
1380	1385	1390	
Cys Lys Gln Glu Asn Gln Tyr Leu Glu Gly Asn Thr Gln Leu Leu Glu			
1395	1400	1405	
Lys Val Lys Ala His Glu Ile Ala Trp Leu His Gly Thr Ile Gln Thr			
1410	1415	1420	
His Gln Glu Arg Pro Arg Val Gln Asn Gln Val Ile Leu Glu Glu Asn			
1425	1430	1435	1440
Thr Thr Leu Leu Gly Phe Gln Asp Lys His Phe Gln His Gln Ala Thr			
1445	1450	1455	
Ile Ala Glu Leu Glu Leu Glu Lys Thr Lys Leu Gln Glu Leu Thr Arg			
1460	1465	1470	
Lys Leu Lys Glu Arg Val Pro Ile Leu Val Lys Gln Lys Asp Val Leu			
1475	1480	1485	
Ser Pro Gly Lys Lys Glu Glu Leu Lys Ala Met Met His Asp Leu			
1490	1495	1500	
Gln Ile Pro Cys Ser Glu Met Gln Gln Lys Val Glu Leu Leu Lys Tyr			
1505	1510	1515	1520
Glu Ser Glu Lys Leu Gln Gln Glu Asn Ser Ile Leu Arg Asn Glu Ile			
1525	1530	1535	
Thr Thr Leu Asn Glu Glu Asp Ser Ile Ser Asn Leu Lys Leu Gly Thr			
1540	1545	1550	
Leu Asn Gly Ser Gln Glu Glu Met Trp Gln Lys Thr Glu Ser Val Lys			
1555	1560	1565	
Gln Glu Asn Ala Ala Val Leu Lys Met Val Glu Asn Leu Lys Lys Gln			
1570	1575	1580	
Ile Ser Glu Leu Lys Ile Lys Asn Gln Gln Leu Asp Leu Glu Asn Thr			
1585	1590	1595	1600
Glu Leu Ser Gln Lys Asn Ser Pro Asn Gln Glu Lys Leu Gln Glu Leu			
1605	1610	1615	
Asn Gln Leu Leu Thr Glu Met Leu Cys Gln Lys Glu Lys Glu Pro Gly			
1620	1625	1630	
Asn Ser Ala Leu Glu Glu Arg Glu Gln Glu Lys Phe Asn Leu Lys Glu			
1635	1640	1645	
Glu Pro Glu Arg Cys Lys Val Gln Ser Ser Thr Leu Val Ser Ser Leu			
1650	1655	1660	
Glu Ala Glu Leu Ser Glu Val Lys Ile Gln Thr His Ile Val Gln Gln			
1665	1670	1675	1680
Glu Asn Pro Leu Leu Gln Asp Glu Leu Glu Lys Met Lys Gln Leu His			
1685	1690	1695	
Arg Cys Pro Asp Leu Ser Asn Phe Gln Gln Lys Ile Ser Ser Val Leu			

1700	1705	1710
Ser Tyr Asn Glu Lys Leu Leu Lys Glu Lys Glu Ala Leu Ser Glu Glu		
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Leu Asn Ser Cys Val Asp Lys Leu Ala Lys Ser Ser Leu Leu Glu His		
1730	1735	1740
Arg Ile Ala Thr Met Lys Gln Glu Gln Lys Ser Trp Glu His Gln Ser		
1745	1750	1755
Ala Ser Leu Lys Thr Gln Leu Val Ala Ser Gln Glu Lys Val Gln Asn		
1765	1770	1775
Leu Glu Asp Thr Val Gln Asn Val Asn Leu Gln Met Ser Arg Met Lys		
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Ser Asp Pro Arg Val Thr Gln Gln Lys Glu Ala Leu Lys Gln Glu		
1795	1800	1805
Val Met Pro Leu His Lys Gln Leu Gln Asn Ser Val Xaa Lys Ser Trp		
1810	1815	1820
Ala Pro Glu Ile Ala Thr His Pro Ser Gly Leu His Asn Gln Gln Lys		
1825	1830	1835
Arg Leu Ser Trp Asp Lys Leu Asp His Leu Met Asn Glu Glu Gln Gln		
1845	1850	1855
Leu Leu Trp Gln Glu Asn Glu Arg Leu Gln Thr Met Val Gln Asn Thr		
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Lys Ala Glu Leu Thr His Ser Arg Glu Lys Val Arg Gln Leu Glu Ser		
1875	1880	1885
Asn Leu Leu Pro Lys His Gln Lys His Leu Asn Pro Ser Gly Thr Met		
1890	1895	1900
Asn Pro Thr Glu Gln Glu Lys Leu Ser Leu Lys Arg Glu Cys Asp Gln		
1905	1910	1915
Phe Gln Lys Glu Gln Ser Pro Ala Asn Arg Lys Val Ser Gln Met Asn		
1925	1930	1935
Ser Leu Glu Gln Glu Leu Glu Thr Ile His Leu Glu Asn Glu Gly Leu		
1940	1945	1950
Lys Lys Lys Gln Val Lys Leu Asp Glu Gln Leu Met Glu Met Gln His		
1955	1960	1965
Leu Arg Ser Thr Ala Thr Pro Ser Pro Ser Pro His Ala Trp Asp Leu		
1970	1975	1980
Gln Leu Leu Gln Gln Gln Ala Cys Pro Met Val Pro Arg Glu Gln Phe		
1985	1990	1995
Leu Gln Leu Gln Arg Gln Leu Leu Gln Ala Glu Arg Ile Asn Gln His		
2005	2010	2015
Leu Gln Glu Glu Leu Glu Asn Arg Thr Ser Glu Thr Asn Thr Pro Gln		
2020	2025	2030
Gly Asn Gln Glu Gln Leu Val Thr Val Met Glu Glu Arg Met Ile Glu		
2035	2040	2045
Val Glu Gln Lys Leu Lys Leu Val Lys Arg Leu Leu Gln Glu Lys Val		
2050	2055	2060
Asn Gln Leu Lys Glu Gln Val Ser Leu Pro Gly His Leu Cys Ser Pro		
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2085	2090	2095

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<211> 2066

<212> DNA

<213> Homo sapiens

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120
gccgcgggaa gcttctcgga ggagcagttc tgggaggcct gcgccgagct ccagcagccc
180
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240
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300
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420
aagtaccctt tcccatgtc caacagagac tatgtctacc ttccgcagcg gcgagacctg
480
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720
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1140
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<211> 214

<212> PRT

<213> Homo sapiens

<400> 2714

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Leu	Val	Glu	Thr	Ser	Gly	Ile	Ser	Ile	Tyr	Arg	Leu	Leu	Asp	Lys	Lys
		35					40					45			
Thr	Gly	Leu	Tyr	Glu	Tyr	Lys	Val	Phe	Gly	Val	Leu	Glu	Asp	Cys	Ser
	50					55					60				
Pro	Thr	Leu	Leu	Ala	Asp	Ile	Tyr	Met	Asp	Ser	Asp	Tyr	Arg	Lys	Gln
65					70				75					80	
Trp	Asp	Gln	Tyr	Val	Lys	Glu	Leu	Tyr	Glu	Gln	Glu	Cys	Asn	Gly	Glu
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Thr	Val	Val	Tyr	Trp	Glu	Val	Lys	Tyr	Pro	Phe	Pro	Met	Ser	Asn	Arg
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Asp	Tyr	Val	Tyr	Leu	Arg	Gln	Arg	Arg	Asp	Leu	Asp	Met	Glu	Gly	Arg
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Lys	Ile	His	Val	Ile	Leu	Ala	Arg	Ser	Thr	Ser	Met	Pro	Gln	Leu	Gly
	130					135					140				
Glu	Arg	Ser	Gly	Val	Ile	Arg	Val	Lys	Gln	Tyr	Lys	Gln	Ser	Leu	Ala
145				150					155					160	
Ile	Glu	Ser	Asp	Gly	Lys	Lys	Gly	Ser	Lys	Val	Phe	Met	Tyr	Tyr	Phe
			165					170					175		
Asp	Asn	Pro	Gly	Gln	Ile	Pro	Ser	Trp	Leu	Ile	Asn	Trp	Ala	Ala	
		180					185				190				
Lys	Asn	Gly	Val	Pro	Asn	Phe	Leu	Lys	Asp	Met	Ala	Arg	Ala	Cys	Gln
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 180
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 240
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 378

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 <212> PRT
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<400> 2716
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 Gln Arg Gly Asp Leu Ser Asp Val Glu Glu Glu Glu Glu Glu Met
 35 40 45
 Asp Val Asp Glu Ala Thr Gly Ala Val Lys Lys His Asn Gly Val Gly
 50 55 60
 Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln
 65 70 75 80
 Lys Leu Arg Gly Met Asp Glu Val Tyr Asn Leu Phe Tyr Val Asn Asn
 85 90 95
 Asn Trp Tyr Ile Phe Met Arg Leu His Gln Ile Leu Cys Leu Arg Leu
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 115 120 125

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 120

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180
aatgaaaggg ggaaaattga gggcaatgtg aggctttgcc tgctgtcggg gacaaatcaa
240
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1440
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 35 40 45
 Thr Thr Gly Glu Gly Ala Gly His Arg Pro Leu Thr Ile Leu His Pro
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 Lys Thr Gly Gly Gln Gly Ser Asp Ala Thr Leu Leu Phe Val Lys Tyr
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 Leu Asp Val Pro Leu Glu Gln Glu Met Ala Lys Glu Asp Pro Val Cys
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 Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr
 65 70 75 80
 Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr Gln Ala Gly
 85 90 95
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 Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly
 115 120 125
 His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala Thr Ser Val
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<210> 2722

<211> 508

<212> PRT

<213> Homo sapiens

<400> 2722

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Ser	Thr	Ser	Phe	Gly	Gly	Gln	Asn	Arg	Gly	Arg	Ser	Asp	Ser	Val	Asp
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Tyr	Gly	Gln	Thr	His	Tyr	Tyr	His	Gln	Arg	Gln	Asn	Ser	Asp	Asp	Lys
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Leu	Asn	Gly	Trp	Gln	Asn	Ser	Arg	Asp	Ser	Gly	Ile	Cys	Ile	Asn	Ala
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Ser	Asn	Trp	Gln	Asp	Lys	Ser	Met	Gly	Cys	Glu	Asn	Gly	His	Val	Pro
			85					90						95	
Leu	Tyr	Ser	Ser	Ser	Val	Pro	Thr	Thr	Ile	Asn	Thr	Ile	Gly	Thr	
		100					105					110			
Ser	Thr	Ser	Thr	Asn	Val	Pro	Ala	Trp	Leu	Lys	Ser	Leu	Arg	Leu	His
		115				120						125			
Lys	Tyr	Ala	Ala	Leu	Phe	Ser	Gln	Met	Thr	Tyr	Glu	Glu	Met	Met	Ala
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Leu	Thr	Glu	Cys	Gln	Leu	Glu	Ala	Gln	Asn	Val	Thr	Lys	Gly	Ala	Arg
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His	Lys	Ile	Val	Ile	Ser	Ile	Gln	Lys	Leu	Lys	Glu	Arg	Gln	Asn	Leu

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 Pro Leu Gln Glu Leu His Gln Met Ile Leu Thr Pro Ile Lys Ala Tyr
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 Ser Ser Pro Ser Thr Thr Pro Glu Ala Arg Arg Arg Glu Pro Gln Ala
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 Pro Arg Gln Pro Ser Leu Met Gly Pro Glu Ser Gln Ser Pro Asp Cys
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 Lys Asp Gly Ala Ala Thr Gly Ala Thr Ala Thr Pro Ser Ala Gly
 245 250 255
 Ala Ser Gly Gly Leu Gln Pro His Gln Leu Ser Ser Cys Asp Gly Glu
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 Arg Val Met Gly Lys Val Cys Thr Gln Leu Leu Val Ser Arg Pro Asp
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 Glu Glu Asn Ile Ser Ser Tyr Leu Gln Leu Ile Asp Lys Cys Leu Ile
 305 310 315 320
 His Glu Ala Phe Thr Glu Thr Gln Lys Lys Arg Leu Leu Ser Trp Lys
 325 330 335
 Gln Gln Val Gln Lys Leu Phe Arg Ser Phe Pro Arg Lys Thr Leu Leu
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 Asn Ser Leu Pro Thr Ala Gly Ser Val Gly Gly Gly Met Gly Arg Arg
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 Asn Pro Arg Gln Tyr Gln Ile Pro Ser Arg Asn Val Pro Ser Ala Arg
 385 390 395 400
 Leu Gly Leu Leu Gly Thr Ser Gly Phe Val Ser Ser Asn Gln Arg Asn
 405 410 415
 Thr Thr Ala Thr Pro Thr Ile Met Lys Gln Gly Arg Gln Asn Leu Trp
 420 425 430
 Phe Ala Asn Pro Gly Gly Ser Asn Ser Met Pro Ser Arg Thr His Ser
 435 440 445
 Ser Val Gln Arg Thr Arg Ser Leu Pro Val His Thr Ser Pro Gln Asn
 450 455 460
 Met Leu Met Phe Gln Gln Pro Glu Phe Gln Leu Pro Val Thr Glu Pro
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 Asp Ile Asn Asn Arg Leu Glu Ser Leu Cys Leu Ser Met Thr Glu His
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<210> 2723

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 2723

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120

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<210> 2724

<211> 404

<212> PRT

<213> Homo sapiens

<400> 2724

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Thr	Ile	His	Met	Phe	Gly	Asp	His	Thr	Asn	Arg	Val	Lys	Arg	Ile	Ala
			20					25					30		
Thr	Ala	Pro	Met	Trp	Pro	Asn	Thr	Phe	Trp	Ser	Ala	Ala	Glu	Asp	Gly
		35					40					45			
Leu	Ile	Arg	Gln	Tyr	Asp	Leu	Arg	Glu	Asn	Ser	Lys	His	Ser	Glu	Val
	50					55					60				
Leu	Ile	Asp	Leu	Thr	Glu	Tyr	Cys	Gly	Gln	Leu	Val	Glu	Ala	Lys	Cys

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Leu Thr Val Asn Pro Gln Asp Asn Asn Cys Leu Ala Val Gly Ala Ser						
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Gly Pro Phe Val Arg Leu Tyr Asp Ile Arg Met Ile His Asn His Arg						
	100		105		110	
Lys Ser Met Lys Gln Ser Pro Ser Ala Gly Val His Thr Phe Cys Asp						
	115		120		125	
Arg Gln Lys Pro Leu Pro Asp Gly Ala Ala Gln Tyr Tyr Val Ala Gly						
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His Leu Pro Val Lys Leu Pro Asp Tyr Asn Asn Arg Leu Arg Val Leu						
	145		150		155	
Val Ala Thr Tyr Val Thr Phe Ser Pro Asn Gly Thr Glu Leu Leu Val						
	165		170		175	
Asn Met Gly Gly Glu Gln Val Tyr Leu Phe Asp Leu Thr Tyr Lys Gln						
	180		185		190	
Arg Pro Tyr Thr Phe Leu Leu Pro Arg Lys Cys His Ser Ser Gly Glu						
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Val Gln Asn Gly Lys Met Ser Thr Asn Gly Val Ser Asn Gly Val Ser						
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Asn Gly Leu His Leu His Ser Asn Gly Phe Arg Leu Pro Glu Ser Arg						
	225		230		235	
Gly His Val Ser Pro Gln Val Glu Leu Pro Pro Tyr Leu Glu Arg Val						
	245		250		255	
Lys Gln Gln Ala Asn Glu Ala Phe Ala Cys Gln Gln Trp Thr Gln Ala						
	260		265		270	
Ile Gln Leu Tyr Ser Lys Ala Val Gln Arg Ala Pro His Asn Ala Met						
	275		280		285	
Leu Tyr Gly Asn Arg Ala Ala Ala Tyr Met Lys Arg Lys Trp Asp Gly						
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Asp His Tyr Asp Ala Leu Arg Asp Cys Leu Lys Ala Ile Ser Leu Asn						
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Pro Cys His Leu Lys Ala His Phe Arg Leu Ala Arg Cys Leu Phe Glu						
	325		330		335	
Leu Lys Tyr Val Ala Glu Ala Leu Glu Cys Leu Asp Asp Phe Lys Gly						
	340		345		350	
Lys Phe Pro Glu Gln Ala His Ser Ser Ala Cys Asp Ala Leu Gly Arg						
	355		360		365	
Asp Ile Thr Ala Ala Leu Phe Ser Lys Asn Asp Gly Glu Glu Lys Lys						
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Gly Cys Thr Arg					400	

<210> 2725

<211> 856

<212> DNA

<213> Homo sapiens

<400> 2725

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<210> 2726

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2726

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Asp	Glu	Asn	Asn	Val	Cys	Phe	Glu	Cys	Gly	Ala	Phe	Asn	Pro	Gln	Trp
			20					25					30		
Val	Ser	Val	Thr	Tyr	Gly	Ile	Trp	Ile	Cys	Leu	Glu	Cys	Ser	Gly	Arg
		35					40					45			
His	Arg	Gly	Leu	Gly	Val	His	Leu	Ser	Phe	Val	Arg	Ser	Val	Thr	Met
	50					55					60				
Asp	Lys	Trp	Lys	Asp	Ile	Glu	Leu	Glu	Lys	Met	Lys	Ala	Gly	Gly	Asn
65				70					75					80	
Ala	Lys	Phe	Arg	Glu	Phe	Leu	Glu	Ser	Gln	Glu	Asp	Tyr	Asp	Pro	Cys
			85					90					95		
Trp	Ser	Leu	Gln	Glu	Lys	Tyr	Asn	Ser	Arg	Ala	Ala	Ala	Leu	Phe	Arg
		100					105						110		
Asp	Lys	Val	Val	Ala	Leu	Ala	Glu	Gly	Arg	Glu	Trp	Ser	Leu	Glu	Ser
		115					120					125			
Ser	Pro	Ala	Gln	Asn	Trp	Thr	Pro	Pro	Gln	Pro	Arg	Thr	Leu	Pro	Ser
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Met	Val	His	Arg												
145															

<210> 2727
 <211> 1119
 <212> DNA
 <213> Homo sapiens

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<210> 2728
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 2728
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<212> DNA
<213> Homo sapiens
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<211> 92
<212> PRT
<213> Homo sapiens
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1970

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      20             25             30
Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys
      35             40             45
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp
      50             55             60
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu
      65             70             75             80
Val Glu Thr Asp Asn Gly Leu Pro Asn Thr Ile Ser
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<210> 2731

<211> 447

<212> DNA

<213> Homo sapiens

<400> 2731

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180
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<210> 2732

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2732

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Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu
      20             25             30
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys
      35             40             45
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly
      50             55             60
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu
      65             70             75             80
Ala Ala Asn Asp Phe Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys
      85             90             95
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys

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	100		105		110
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<210> 2733

<211> 3619

<212> DNA

<213> Homo sapiens

<400> 2733

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<211> 790

<212> PRT

<213> Homo sapiens

<400> 2734

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			20					25					30		
Val	Met	Asp	Lys	Leu	Arg	Leu	Ala	Glu	Leu	Thr	Val	Asp	Glu	Phe	Leu
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Ala	Ser	Gly	Phe	Asp	Ser	Glu	Ser	Glu	Ser	Glu	Ser	Glu	Asn	Ser	Pro
	50				55				60						
Gln	Ala	Glu	Thr	Arg	Glu	Ala	Arg	Glu	Ala	Ala	Arg	Ser	Pro	Asp	Lys
65				70				75						80	
Pro	Gly	Gly	Ser	Pro	Ser	Ala	Ser	Arg	Arg	Lys	Gly	Arg	Ala	Ser	Glu
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His	Lys	Asp	Gln	Leu	Ser	Arg	Leu	Lys	Asp	Arg	Asp	Pro	Glu	Phe	Tyr
		100					105					110			
Lys	Phe	Leu	Gln	Glu	Asn	Asp	Gln	Ser	Leu	Leu	Asn	Phe	Ser	Asp	Ser
	115					120					125				
Asp	Ser	Ser	Glu	Glu	Glu	Glu	Gly	Pro	Phe	His	Ser	Leu	Pro	Asp	Val
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Leu	Glu	Glu	Ala	Ser	Glu	Glu	Glu	Asp	Gly	Ala	Glu	Glu	Gly	Glu	Asp
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Gly	Asp	Arg	Val	Pro	Arg	Gly	Leu	Lys	Gly	Lys	Lys	Asn	Ser	Val	Pro
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Val	Thr	Val	Ala	Met	Val	Glu	Arg	Trp	Lys	Gln	Ala	Ala	Lys	Gln	Arg

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Leu Thr Pro	Lys Leu Phe His	Glu Val Val	Gln Ala Phe Arg	Ala Ala		
195		200		205		
Val Ala Thr	Thr Arg Gly Asp	Gln Glu Ser	Ala Glu Ala Asn	Lys Phe		
210		215		220		
Gln Val Thr	Asp Ser Ala Ala	Phe Asn Ala	Leu Val Thr	Phe Cys Ile		
225		230		235		240
Arg Asp Leu	Ile Gly Cys Leu	Gln Lys Leu	Leu Phe Gly	Lys Val Ala		
	245		250		255	
Lys Asp Ser	Ser Arg Met Leu	Gln Pro Ser	Ser Ser Pro	Leu Trp Gly		
	260		265		270	
Lys Leu Arg	Val Asp Ile Lys	Ala Tyr Leu	Gly Ser Ala	Ile Gln Leu		
	275		280		285	
Val Ser Cys	Leu Ser Glu Thr	Thr Val Leu	Ala Ala Val	Leu Arg His		
	290		295		300	
Ile Ser Val	Leu Val Pro Cys	Phe Leu Thr	Phe Pro Lys	Gln Cys Arg		
305		310		315		320
Met Leu Leu	Lys Arg Met Val	Val Val Trp	Ser Thr Gly	Glu Glu Ser		
	325		330		335	
Leu Arg Val	Leu Ala Phe Leu	Val Leu Ser	Arg Val Cys	Arg His Lys		
	340		345		350	
Lys Asp Thr	Phe Leu Gly Pro	Val Leu Lys	Gln Met Tyr	Ile Thr Tyr		
	355		360		365	
Val Arg Asn	Cys Lys Phe Thr	Ser Pro Gly	Ala Leu Pro	Phe Ile Ser		
	370		375		380	
Phe Met Gln	Trp Thr Leu Thr	Glu Leu Leu	Ala Leu Glu	Pro Gly Val		
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Ala Tyr Gln	His Ala Phe Leu	Tyr Ile Arg	Gln Leu Ala	Ile His Leu		
	405		410		415	
Arg Asn Ala	Met Thr Thr Arg	Lys Lys Glu	Thr Tyr Gln	Ser Val Tyr		
	420		425		430	
Asn Trp Gln	Tyr Val His Cys	Leu Phe Leu	Trp Cys Arg	Val Leu Ser		
	435		440		445	
Thr Ala Gly	Pro Ser Glu Ala	Leu Gln Pro	Leu Val Tyr	Pro Leu Ala		
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Gln Val Ile	Ile Gly Cys Ile	Lys Leu Ile	Pro Thr Ala	Arg Phe Tyr		
465		470		475		480
Pro Leu Arg	Met His Cys Ile	Arg Ala Leu	Thr Leu Leu	Ser Gly Ser		
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Ser Gly Ala	Phe Ile Pro Val	Leu Pro Phe	Ile Leu Glu	Met Phe Gln		
	500		505		510	
Gln Val Asp	Phe Asn Arg Lys	Pro Gly Arg	Met Ser Ser	Lys Pro Ile		
	515		520		525	
Asn Phe Ser	Val Ile Leu Lys	Leu Ser Asn	Val Asn Leu	Gln Glu Lys		
	530		535		540	
Ala Tyr Arg	Asp Gly Leu Val	Glu Gln Leu	Tyr Asp Leu	Thr Leu Glu		
545		550		555		560
Tyr Leu His	Ser Gln Ala His	Cys Ile Gly	Phe Pro Glu	Leu Val Leu		
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Pro Val Val	Leu Gln Leu Lys	Ser Phe Leu	Arg Glu Cys	Lys Val Ala		
	580		585		590	
Asn Tyr Cys	Arg Gln Val Gln	Gln Leu Leu	Gly Lys Val	Gln Glu Asn		
	595		600		605	
Ser Ala Tyr	Ile Cys Ser Arg	Arg Gln Arg	Val Ser Phe	Gly Val Ser		

610	615	620
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Thr Pro Leu Thr	Leu Tyr Tyr Ser His Trp Arg	Lys Leu Arg Asp Arg
	645	650
Glu Ile Gln Leu Glu	Ile Ser Gly Lys Glu Arg	Val Arg Leu Gly Glu
	660	665
Gly Thr Trp Leu Glu	Asp Leu Asn Phe Pro Glu	Ile Lys Arg Arg Lys
	675	680
Met Ala Asp Arg Lys	Asp Glu Asp Arg Lys Gln	Phe Lys Asp Leu Phe
	690	695
Asp Leu Asn Ser Ser	Glu Glu Asp Asp Thr Glu	Gly Phe Leu Glu Arg
	705	710
Gly Ile Leu Gly Pro	Leu Ser Thr Arg His Gly	Val Glu Asp Asp Glu
	725	730
Glu Asp Glu Glu Glu	Gly Glu Glu Asp Ser Ser	Asn Ser Glu Gly Glu
	740	745
Trp Ser Trp Asp Gly	Asp Pro Asp Ala Glu Ala	Gly Leu Ala Pro Gly
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Gln Leu Ser Glu Asp	Asp	
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<210> 2735

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 2735

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<210> 2736

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2736

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			20						25				30		
Phe	His	Ser	Ser	His	Ile	Ser	Thr	Ile	Gly	Val	Asp	Phe	Lys	Met	Lys
		35					40					45			
Thr	Ile	Glu	Val	Asp	Gly	Ile	Lys	Val	Arg	Ile	Gln	Ile	Trp	Asp	Thr
	50					55					60				
Ala	Gly	Gln	Glu	Arg	Tyr	Gln	Thr	Ile	Thr	Lys	Gln	Tyr	Tyr	Arg	Arg
65					70					75				80	
Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
				85					90					95	
Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
			100					105					110		
Gly	Val	Gln	Lys	Ile	Leu	Ile	Gly	Asn	Lys	Ala	Asp	Glu	Glu	Gln	Lys

115	120	125
Arg Gln Val Gly Arg Glu Gln Gly Gln Gln Lys Cys Pro Ser Leu Gln		
130	135	140
Leu Ala Lys Glu Tyr Gly Met Asp Phe Tyr Glu Thr Ser Ala Cys Thr		
145	150	155
Asn Leu Asn Ile Lys Glu Ser Phe Thr Arg Leu Thr Glu Leu Val Leu		
165	170	175
Gln Ala His Arg Lys Glu Leu Glu Gly Leu Arg Met Arg Ala Ser Asn		
180	185	190
Glu Leu Ala Leu Ala Glu Leu Glu Glu Glu Gly Lys Pro Glu Gly		
195	200	205
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<210> 2737

<211> 898

<212> DNA

<213> Homo sapiens

<400> 2737

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<210> 2738

<211> 299

<212> PRT

<213> Homo sapiens

<400> 2738

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 Ile Val Asp Gln Cys Glu Arg Leu Gln Leu Gln Ser Ala Ala Ile Thr
 35 40 45
 Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser
 50 55 60
 Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val
 65 70 75 80
 Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His
 85 90 95
 Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His
 100 105 110
 Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val
 115 120 125
 Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln
 130 135 140
 Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln
 145 150 155 160
 Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu
 165 170 175
 Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr
 180 185 190
 Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu
 195 200 205
 Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys
 210 215 220
 Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala
 225 230 235 240
 Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn
 245 250 255
 Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys
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 Gly Ser Gly Ser Asp Cys Arg Leu Gly His Asn Ala Phe Ser Trp Val
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<210> 2739

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2739

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480
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1501

<210> 2740

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2740

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	20	25	30
Ile Ile Ser	Gly Val Val Ser Leu Phe Ile Phe Gly Phe Cys Trp Leu		
	35	40	45
Ser Pro Ala	Leu Gln Asp Leu Gln Ala Thr Glu Ala Asn Cys Thr Val		
	50	55	60
Leu Ser Val	Gln Gln Ile Gly Glu Val Phe Glu Cys Thr Phe Thr Cys		
65	70	75	80
Gly Ala Asp	Cys Arg Gly Thr Ser Gln Tyr Pro Cys Val Gln Val Tyr		
	85	90	95
Val Asn Asn	Ser Glu Ser Asn Ser Arg Ala Leu Leu His Ser Asp Glu		
	100	105	110
His Gln Leu	Leu Thr Asn Pro Lys Cys Ser Tyr Ile Pro Pro Cys Lys		
	115	120	125
Arg Glu Asn	Gln Lys Asn Leu Glu Ser Val Met Asn Trp Gln Gln Tyr		
	130	135	140
Trp Lys Asp	Glu Ile Gly Ser Gln Pro Phe Thr Cys Tyr Phe Asn Gln		
145	150	155	160
His Gln Arg	Pro Asp Asp Val Leu Leu His Arg Thr His Asp Glu Ile		
	165	170	175
Val Leu Leu	His Cys Phe Leu Trp Pro Leu Val Thr Phe Val Val Gly		
	180	185	190
Val Leu Ile	Val Val Leu Thr Ile Cys Ala Lys Ser Leu Ala Val Lys		
	195	200	205
Ala Glu Ala	Met Lys Lys Arg Lys Phe Ser		
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<210> 2741

<211> 1487

<212> DNA

<213> Homo sapiens

<400> 2741

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120
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180
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600

gacagcccag tgggaagaag caaactccag atgggcagaa ggcagggtgc acagggtggct
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 720
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 780
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 1487

<210> 2742

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2742

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Tyr	Arg	Asp	Asp	Leu	Asp	Leu	Gln	Asn	Leu	Ile	Asp	Phe	Gly	Gln	Lys
			20					25					30		
Lys	Phe	Ser	Cys	Cys	Gly	Gly	Ile	Ser	Tyr	Lys	Asp	Trp	Ser	Gln	Asn
			35				40					45			
Met	Tyr	Phe	Asn	Cys	Ser	Glu	Asp	Asn	Pro	Ser	Arg	Glu	Arg	Cys	Ser
			50				55				60				
Val	Pro	Tyr	Ser	Cys	Cys	Leu	Pro	Thr	Pro	Asp	Gln	Ala	Val	Ile	Asn
65					70					75				80	
Thr	Met	Cys	Gly	Gln	Gly	Met	Gln	Ala	Phe	Asp	Tyr	Leu	Glu	Ala	Ser
			85					90					95		
Lys	Val	Ile	Tyr	Thr	Asn	Gly	Cys	Ile	Asp	Lys	Leu	Val	Asn	Trp	Ile
			100				105						110		
His	Ser	Asn	Leu	Phe	Leu	Leu	Gly	Gly	Val	Ala	Leu	Gly	Leu	Ala	Ile
			115				120					125			
Pro	Gln	Leu	Val	Gly	Ile	Leu	Leu	Ser	Gln	Ile	Leu	Val	Asn	Gln	Ile

130 135 140
 Lys Asp Gln Ile Lys Leu Gln Leu Tyr Asn Gln Gln His Arg Ala Asp
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 Pro Trp Tyr

<210> 2743
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 2743
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 180
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 240
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 360
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 384

<210> 2744
 <211> 69
 <212> PRT
 <213> Homo sapiens

<400> 2744
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 Asp Trp Ser Val Pro Ser Pro Pro Thr Ala Ser Gln Asp Ser Gly Val
 35 40 45
 Gln Ser Pro Pro Gly Ala Ser Arg Asp Trp Ser Val Pro Ser Pro Pro
 50 55 60
 Arg Ala Tyr Gln Asp
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<210> 2745
 <211> 769
 <212> DNA
 <213> Homo sapiens

<400> 2745
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 120

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<210> 2746

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2746

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Lys	Leu	Pro	Asp	Gln	Pro	Ser	His	His	Thr	Gln	Lys	Arg	Pro	Phe	Pro
			20					25					30		
Ser	Gly	Glu	Lys	Leu	Pro	Asp	Gln	Pro	Phe	Thr	His	His	Ser	Gln	Glu
		35					40					45			
Gly	Pro	Phe	Pro	Pro	Gly	Arg	Glu	Thr	Ser	Arg	Pro	Ala	Pro	His	Thr
		50				55					60				
Thr	Ala	Lys	Arg	Gly	Leu	Ser	His	Leu	Glu	Arg	Asn	Phe	Gln	Thr	Ser
65					70					75				80	
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Pro Asp

<210> 2747

<211> 1100

<212> DNA

<213> Homo sapiens

<400> 2747

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 120

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 180
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 660
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 720
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<210> 2748

<211> 205

<212> PRT

<213> Homo sapiens

<400> 2748

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Glu	Pro	Arg	Pro	Ala	Pro	Arg	Thr	Ala	Pro	Arg	Lys	Pro	Glu	Ser	Pro
		20					25					30			
Trp	Thr	Gly	Ala	Phe	Trp	Ile	Pro	Arg	Pro	Pro	Ala	Gly	Ser	Pro	Lys
		35				40					45				
Gly	Cys	Phe	Ala	Cys	Val	Ser	Lys	Pro	Pro	Ala	Leu	Gln	Ala	Pro	Ala
	50					55				60					
Ala	Pro	Ala	Pro	Glu	Pro	Ser	Ala	Ser	Pro	Pro	Met	Ala	Pro	Thr	Leu
65				70					75				80		
Phe	Pro	Met	Glu	Ser	Lys	Ser	Ser	Lys	Thr	Asp	Ser	Val	Arg	Ala	Ala
			85					90				95			
Gly	Ala	Pro	Pro	Ala	Cys	Lys	His	Leu	Ala	Glu	Lys	Lys	Thr	Met	Thr

	100		105		110										
Asn	Pro	Thr	Thr	Val	Ile	Glu	Val	Tyr	Pro	Asp	Thr	Thr	Glu	Val	Asn
	115						120					125			
Asp	Tyr	Tyr	Leu	Trp	Ser	Ile	Phe	Asn	Phe	Val	Tyr	Leu	Asn	Phe	Cys
	130					135					140				
Cys	Leu	Gly	Phe	Ile	Ala	Leu	Ala	Tyr	Ser	Leu	Lys	Val	Arg	Asp	Lys
145					150				155					160	
Lys	Leu	Leu	Asn	Asp	Leu	Asn	Gly	Ala	Val	Glu	Asp	Ala	Lys	Thr	Ala
			165					170					175		
Arg	Leu	Phe	Asn	Ile	Thr	Ser	Ser	Ala	Leu	Ala	Ala	Ser	Cys	Ile	Ile
			180					185					190		
Leu	Val	Phe	Ile	Phe	Leu	Arg	Tyr	Pro	Leu	Thr	Asp	Tyr			
	195						200					205			

<210> 2749

<211> 2050

<212> DNA

<213> Homo sapiens

<400> 2749

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360
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1020

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 1260
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<210> 2756

<211> 550

<212> PRT

<213> Homo sapiens

<400> 2756

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Phe Ala Glu Thr Met Glu Leu His Thr Phe Leu Thr Lys Ile Lys Ser
      35           40           45
Ala Lys Glu Asn Leu Lys Lys Ile Gln Glu Met Glu Lys Ser Asp Glu
 50           55           60
Ser Ser Thr Asp Leu Glu Glu Leu Lys Asn Ala Asp Trp Ala Arg Phe
65           70           75           80
Trp Val Gln Val Met Arg Asp Leu Arg Asn Gly Val Lys Leu Lys Lys
          85           90           95
Val Gln Glu Arg Gln Tyr Asn Pro Leu Pro Ile Glu Tyr Gln Leu Thr
          100          105          110
Pro Tyr Glu Met Leu Met Asp Asp Ile Arg Cys Lys Arg Tyr Thr Leu
      115          120          125
Arg Lys Val Met Val Asn Gly Asp Ile Pro Pro Arg Leu Lys Lys Ser
130          135          140
Ala His Glu Ile Ile Leu Asp Phe Ile Arg Ser Arg Pro Pro Leu Asn
145          150          155          160
Pro Val Ser Ala Arg Lys Leu Lys Pro Thr Pro Pro Arg Pro Arg Ser
          165          170          175
Leu His Glu Arg Ile Leu Glu Glu Ile Lys Ala Glu Arg Lys Leu Arg
      180          185          190
Pro Val Ser Pro Glu Glu Ile Arg Arg Ser Arg Leu Asp Val Thr Thr
      195          200          205
Pro Glu Ser Thr Lys Asn Leu Val Glu Ser Ser Met Val Asn Gly Gly
210          215          220
Leu Thr Ser Gln Thr Lys Glu Asn Gly Leu Ser Thr Ser Gln Gln Val
225          230          235          240
Pro Ala Gln Arg Lys Lys Leu Leu Arg Ala Pro Thr Leu Ala Glu Leu
          245          250          255
Asp Ser Ser Glu Ser Glu Glu Glu Thr Leu His Lys Ser Thr Ser Ser
      260          265          270
Ser Ser Val Ser Pro Ser Phe Pro Glu Glu Pro Val Leu Glu Ala Val
      275          280          285
Ser Thr Arg Lys Lys Pro Pro Lys Phe Leu Pro Ile Ser Ser Thr Pro
290          295          300
Gln Pro Glu Arg Arg Gln Pro Pro Gln Arg Arg His Ser Ile Glu Lys
305          310          315          320
Glu Thr Pro Thr Asn Val Arg Gln Phe Leu Pro Pro Ser Arg Gln Ser
          325          330          335
Ser Arg Ser Leu Glu Glu Phe Cys Tyr Pro Val Glu Cys Leu Ala Leu
      340          345          350
Thr Val Glu Glu Val Met His Ile Arg Gln Val Leu Val Lys Ala Glu
      355          360          365
Leu Glu Lys Tyr Gln Gln Tyr Lys Asp Ile Tyr Thr Ala Leu Lys Lys
370          375          380
Gly Lys Leu Cys Phe Cys Cys Arg Thr Arg Arg Phe Ser Phe Phe Thr
385          390          395          400
Trp Ser Tyr Thr Cys Gln Phe Cys Lys Arg Pro Val Cys Ser Gln Cys
          405          410          415
Cys Lys Lys Met Arg Leu Pro Ser Lys Pro Tyr Ser Thr Leu Pro Ile

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	420		425		430										
Phe	Ser	Leu	Gly	Pro	Ser	Ala	Leu	Gln	Arg	Gly	Glu	Ser	Ser	Met	Arg
	435				440						445				
Ser	Glu	Lys	Pro	Ser	Thr	Ala	His	His	Arg	Pro	Leu	Arg	Ser	Ile	Ala
	450				455						460				
Arg	Phe	Ser	Ser	Lys	Ser	Lys	Ser	Met	Asp	Lys	Ser	Asp	Glu	Glu	Leu
465				470						475				480	
Gln	Phe	Pro	Lys	Glu	Leu	Met	Glu	Asp	Trp	Ser	Thr	Met	Glu	Val	Cys
			485					490					495		
Val	Asp	Cys	Lys	Lys	Phe	Ile	Ser	Glu	Ile	Ile	Ser	Ser	Ser	Arg	Arg
		500						505				510			
Ser	Leu	Val	Leu	Ala	Asn	Lys	Arg	Ala	Arg	Leu	Lys	Arg	Lys	Thr	Gln
	515				520						525				
Ser	Phe	Tyr	Met	Ser	Ser	Pro	Gly	Pro	Ser	Glu	Tyr	Cys	Pro	Ser	Glu
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<210> 2757

<211> 449

<212> DNA

<213> Homo sapiens

<400> 2757

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<210> 2758

<211> 82

<212> PRT

<213> Homo sapiens

<400> 2758

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Gln	Asp	His	Ser	Ser	Leu	Asn	Pro	Gln	Lys	Trp	His	Cys	Val	Asp	Cys
	20						25					30			
Asn	Thr	Thr	Glu	Ser	Ile	Trp	Ala	Cys	Leu	Ser	Cys	Ser	His	Val	Ala
	35					40					45				
Cys	Gly	Arg	Tyr	Ile	Glu	Glu	His	Ala	Leu	Lys	His	Phe	Gln	Glu	Ser